

DISTRIBUTION AND WAREHOUSING



The Business Paper of the Warehouse Industry

Reg. U. S. Pat. Office.

Volume 34

NEW YORK, MAY, 1935

No. 5

Solicitation of Accounts Does Not Require an Elaborate Sales Force

An alert storage executive tells the author:

"If our warehouse had one hundred active accounts, or about that many, we'd be tickled pink.

To add one a month, or a dozen a year, would be good management, because that would swell our volume all the time. Not that many would drop out.

Now what's the sense of running wild over the U.S.A.? It is better, and cheaper, to concentrate our best efforts on a few real prospects."

By H. A. HARING

NO profit is possible for a business until the product is sold. This is a rule as plain as two plus two and it applies equally to the farmer with his crops, to the manufacturer with his goods and to the professional man with his services.

Warehousing is essentially a servicing industry, and, as such, it cannot earn a margin for itself until those services have found a buyer.

A going business does two things: it creates its product or service, and it does selling.

The past few years have shown us that overproduction is upon us. Almost without an exception our business concerns are able to produce more than they can sell. It is hardly necessary to say more, because everyone has faced the situation and worried about it until he is sick of the whole thing. For, without volume of sales, prosperity for a business is out of the question. Even those who staked most faith in the NRA Codes have now come back to earth—they agree that no Code can bring salvation for a business. A Code may improve conditions of competition, it may eradicate senseless waste, but no Code can create volume. Therefore warehousemen, after a year of

Codes, are today hunting for volume in the only way that it ever has been possible to obtain it—namely, through quality of service, price and salesmanship.

Good warehouses already possess quality of service. They believe their prices are right, especially under Code scrutiny.

It remains for them to do a man-size job of salesmanship in order to store goods enough to show a profit for the company.

As an outsider buzzes among warehousemen some surprising things come to his attention. One of them is warehouse selling; in other words, the solicitation of accounts for the warehouse.

Some warehouses seem to do the trick almost silently, with so little fuss and so small a force of men that volume appears to flow in without effort. Others maintain elaborate sales forces, seem to go through so many motions, and then complain that business is without profit.

The contrast between these two extremes is striking, and, aside from them, the whole industry flounders under the cost of much needless solicitation of the better known national accounts.

IT would be wonderful if a concern could sell its product without expense. No one, however, has attained this end. Occasionally in newspaper "ads" some manufacturer or retailer will burst forth with claims that he "eliminates all middlemen" or that he "sells direct from factory to you"; but the claims are sheer fiction. Whatever may be the claim and however loud the yelling, selling without expense is not possible. It costs to sell. The very "ad" making the announcement is an expense which gives the lie to such extravagant statements; the very salesmen who meet the customer thus enticed are denial of the claim, unless they work without compensation and unless the display room is rent-free, light-free, and so on.

On the contrary, the cost of selling tends to grow.

A friend of mine bought a warehouse in 1931, combined merchandise and furniture, which he was really forced to purchase because the mortgage he held threw the house into his hands. The first month of his ownership he showed me the budget for operations of the preceding year, worked out from the books of the previous owner. He said:

"That chap must be an awful manager. He had income of \$61,000 and all his expenses were only \$38,000. He failed to meet the taxes and he paid no attention to my interest. He must have pocketed the rest before he died; and a nice income it was!"

Some questioning rather disturbed his certainty; but, in another week, the new owner felt sure again, as he told me:

"No, you're wrong. Thirty-eight thousand is all it cost to run the house. I can't find from the books what he spent for advertising and other selling. He never kept account of them—just the warehouse payroll and the supplies he bought."

Disillusionment followed, and very shortly at that. The \$38,000 took no account of the owner's drawing account, nor of what he paid one full-time solicitor, nor the commissions allowed to three others who "represented" the warehouse. And, within two or three months, the new owner was horrified, as you will see, when he told me:

"I bought a lemon all right. The first two months I operated the place, the bills for solicitation nearly equaled the total income! That fellow tried to gull himself by not keeping books. The reason he never paid taxes or interest is that he never had the money. It cost him half his gross billings to get the business."

At another time—after being a warehouseman for two years—this new owner commented to me:

"A lot of warehousemen in this State are like farmers in the old days. The farmer, you know, never taught his son anything. He just threw the boy out on the farm, like the cows, to rustle for himself. These warehousemen know how to haul and store but they trade their eyeteeth to collar an account."

He continued in this strain:

"That chap"—referring to the former owner, now dead—"paid out over ten

thousand a year for salary and expenses for salesmen who never brought in that much gross any year. They were calling on big names in the far-away cities and never getting anywhere. In the whole warehouse, when I took it over, there were not thirty lots of merchandise originating out of town. The rest was controlled right at home.

Clearly here is one instance of not controlling the cost to sell the service. Nor, as an outsider talks with warehousemen, is this found to be an isolated example. Many of them—far too many—are skilled managers in everything but their solicitation. This end of the business is a continual waste. It costs altogether too much for the results obtained.

Study Your Business

WE have, especially in the larger cities, warehouses equipped for large volume in store. They are amply justified in maintaining a soliciting force to contact all national distributors. Indeed, they must, because they cater to such patrons. Necessarily these houses must spend money to tie up this volume. It pays them to do so.

We are thinking, however, of those thousands of our warehouses located at lesser centers whose volume never warrants costly solicitation. These houses might keep a man on the road all year, calling on the famed national accounts, without getting enough volume to pay the cost. Sad to say, all the evidence points to the fact that many are doing this very thing, as with the house my friend purchased.

Possibly what he did in 1931 and 1932 will point the way to a control of the cost for selling warehouse services.

At the bottom of the depression he sat down and cogitated his problem. He was able to "turn the corner" in 1932, and, for both 1933 and 1934, the house he bought has earned a nice profit, although in 1931 he himself knew absolutely nothing about warehousing. He tells me that 1934 earnings were so good that his Federal income tax for the warehouse exceeded \$1,800 and his New York State tax payment will be even higher. Figure this as you will, it is apparent that he has turned a loss into a profit.

The first thing he did was to make a list of the "accounts" for merchandise which had been passing through the house. Across the three years before his ownership he found only 141 names. The high point was "about 60 different" stocks of goods at any one time during the three years. Names had come and names had gone but 60 was the peak.

"Well," thought he, "if I have only sixty customers to worry about that's something. I supposed I had as many as the railroad freight station! I begin to wonder why I need an outside salesman at all."

Next he jotted down names.

The skeleton of his list was made up of past and former accounts of the house. By talking about town, and by keeping his eyes open, names were added of those concerns whose goods were coming into town for distribution. Thus the list grew

to "over five hundred" before he began to prune.

First he crossed off the names of "accounts" well entrenched within competing warehouses of the city. He would not waste effort and spend money in futile solicitation. He determined to handle them in another way.

Next he crossed off names of a few national accounts, after attending a State convention and after several talks with one of the warehouse chains, "because they're not profitable." He decided not to wear himself out begging for volume which must be taken at a loss, especially those accounts with "bad reputations" among fellow warehousemen.

The records of his house showed that 60 active accounts, of approximately the volume of the average good account the house had had, would double the peak gross income of the previous owner. He was not dreaming of immense billings. He merely based a calculation of the billings actually proven to be possible in that house. Despite the evil ways into which the house had fallen, he felt that he already had "12 or 15" of these accounts under the roof. He also inherited "about 20" others promising enough—in the light of past turnovers—for him to "work on in the hope of building them into something worth while."

With this in view he jotted down the names of these, and a few others especially likely, and compiled a list of 31. Then he called in the outside salesman, whom he had retained during these first months.

"I gave him those names," he relates, "and told him to write down everything he knew about each of them. And to think up what our warehouse could offer to each, a bit different or better than anyone else—some 'reason why' we ought to handle the account."

The idea was to concentrate, for a short time, all selling effort on these 31 concerns, approaching each of them with some argument unlike what every warehouse could offer. It was not possible to think up such an argument for all. But, out of their plotting together, the story of that warehouse was presented more aggressively. They emphasized particularly their knowledge of local conditions, rehearsing for this purpose what they called "seven local arguments" which aimed to demonstrate that the warehouse was a better representative than its competitors.

Then, for one month, the salesman was assigned to twenty of these prospects; the owner himself took over the remaining eleven.

"My salesman," reported the owner after it was all over, "was shocked when I told him to call on only twenty in a month but to call on them over and over again until he won them. He prided himself on being able to make about that many calls a day and I turned that statement into proof that he couldn't possibly do any good on the touch-and-go system. He worked harder that month than ever in his life, because when he tried to call on a prospect several times in one week he either had to have something to say, or would get the door."

The one month dragged into nearly two. In that time, between them, they had signed up four new accounts. This was more than the former manager had usually gotten in a year as the result of actual salesmanship.

Listen, however, to this:

"We got four of them within the two months. But, we did not stop working on the rest of them. Inside the year, 1931, eleven of those 31 were under our roof and every one is still with us (January, 1935)."

Since that first experiment the same method has been followed.

This owner finally prepared a list of about 120 distributors, outside his own city, who seemed logical prospects for the house. Good accounts with competing houses were not even listed. They were left for other methods of approach.

Then all sales effort was concentrated on the selected prospects. When a call was planned definite preparation was made beforehand, especially getting posted thoroughly about the prospect's volume and distribution in the warehouseman's own community and such local facts as might be interesting. A "call" ceased to be a pretty "begging for a look-in of your volume" but became a hard-hitting solicitation for a spot stock right now, with definite reasons "why." Generalities and vague statements were dropped. They were replaced by arguments applicable only to the account's own commodity in that specific market.

Inasmuch as calls were now restricted to a logical list of concerns, they found it possible to "invent some plausible reason for each call" so that calls became appointments with the man they wanted to meet rather than drop-in and catch-as-catch-can interviews. Before making a call, correspondence prepared the way. The new owner has worked out some clever "baiting" letters, or "teasers," as he calls them, which are preliminary to a call.

The important change is not tricky cleverness but sheer hard planning.

This warehouseman has quit thinking of all the national accounts in the country. He casts most of them to the winds. All he remembers are the hundred or so which he believes his house can serve better than can competing houses.

Not House-to-House Selling

REPEATEDLY I have heard one warehouseman, whom I hold to be one of the best salesmen in the industry, make a remark like this:

"A warehouse is not in the house-to-house game. Doorbell-ringing is foolishness for us. Hit-and-miss solicitation reminds me of a peanut rolling about on the floor of a boxcar—it wears itself out but gets nowhere."

That particular warehouseman plans long and carefully before he makes a call. When he does, the prospect remembers the hour, because that warehouse is set before him as an opportunity not to be overlooked in next year's profits.

This method is quite in contrast with so many solicitations which merely re-

peat over and over again the old platitudes, and, at bottom, do little more than offer to cut an existing rate either openly or secretly.

It was, indeed, quite a surprise last summer to discover that two of our very largest warehouses have soliciting staffs which are hardly more than a skeleton. A man is kept "on the outside" to follow up leads and run down the many suggestions of new accounts to be had; but, when it comes to a real solicitation, *one of the principals himself goes for it.* The belief is that two or three new accounts a month is all they can expect—meaning, of course, accounts which carry any real volume—and that this number can be best solicited by the management itself. *The real salesmanship is directed to selected prospects.*

Spreading Out

OFTEN these warehousemen have been asked this question:

"Doesn't that result in your missing a lot of accounts you ought to have?"

One man holds this opinion:

"Even if we chase every rabbit in the field we bag the limit if we get one or two. It's just as well to sit in a warm spot and shoot those that come our way."

This sounded too vague to satisfy me. I asked for warehouse "dope"—not wild game.

"Why," explained he, "it's easy to deceive yourself. This chasing up and down the country like an untrained bird dog gets you nowhere. If our warehouse had one hundred active accounts, or about that many, we'd be tickled pink. To add one a month, a dozen a year, would be good management, because that would swell our volume all the time. Not that many would drop out. Now what's the sense in running wild over the U. S. A.?"

"Isn't it better, and cheaper, to concentrate our best efforts on a few real prospects? Then, I can go myself, and not send some hireling who probably strikes the prospect as exactly like the last fellow, or the next one. And, if we get the account, we've established a personal contact that will last for years. But if we send the ordinary solicitor, he's only a salesman and drops out of the picture when the goods begin to move."

Yet, obviously, even such a warehouse follows up definite inquiries, much as any organization would do. For, hidden among these inquiries, often lie the first hints of valuable new accounts.

From another, who was asked a similar question about missing some accounts, comes this suggestion:

"That's where our advertising fills the gap."

"We keep our name before storers of goods wherever they'd be likely to look for information. It would be only luck if we discovered a potential storer before he knew about warehouses. I take it that such a fellow will look up the going warehouses, just as anybody looks up anything. Only the dead ones do not advertise; not to would be like staying out of the telephone book."

"It's the advertising that brings in fresh prospects. That is our way of blanketing the possible accounts. When one shows up we run it down; but our real selling is confined to a very few places—you'd hardly believe me if I say how few they are."

"The only other thing we do is about once a year to mail out some striking broadsides to all the distributors we know about. This is a sort of feeler, to bring our name before them, so that if they do contemplate a change they'll think of us. Beyond that, we do nothing to solicit accounts which we know are in good warehouses. It's wasted effort to try to switch them. The only immediate appeal is to cut the rate—which we do not do—and if they come to the point of making a change, we trust to our advertising and the once-a-year mailings to make them remember us."

Thus do some warehouses manage to spread out while holding their sales effort to a limited number of prospects.

Warehousing is fortunate that it does not require patronage from the masses, as a food product does. Its advertising may be directed definitely to the few who control stocks; its solicitation does not demand an army of salesmen to comb the same prospects today and then again tomorrow. Such solicitation may bring in a poolcar occasionally but it is useless for storage accounts. These continue from month to month, when once properly signed up, and they are not to be won or lost by pestering distributors for stray lots.

Indeed, out of this inquiry into control of selling costs, the most impressive conclusion is that many of our warehouses are spending altogether too much in soliciting new business. Their salary roll and expense allowances are out of all proportion to the results achieved. The best managements have curtailed in their selling, to their own profit; and, as already hinted, except for a few very large organizations in the principal cities, the best warehouse soliciting is done where only a limited number of prospects are "bothered" at all.

Quaker City Firm's Plan of Reorganization Is Approved

An order confirming the plan of reorganization of the Quaker City Cold Storage Co., Philadelphia, under Section 77-B of the amended Federal Bankruptcy Act, was entered in United States District Court in Philadelphia by Judge W. H. Kirkpatrick in April. The order dismisses all exceptions to the report of Special Master David Bachman which were filed last February by holders of \$27,000 principal amount of first mortgage bonds of the company, as contestants to the proposed reorganization plan, and confirms and approves that report in all respects.

The Court expressed itself as satisfied that the reorganization plan is fair and equitable and does not discriminate unfairly, or in favor of any class of creditors or stockholders, and is feasible, and that the plan complies with the amended Bankruptcy Act.

Government Announces

1934 Average Occupancy

of Merchandise Warehouses

Improved Over 1933

Recent year's figure 66.0 per cent as compared with 62.5—Graphs and Tables visualize picture across seven years

By
KENT B. STILES

THE average occupancy of public merchandise warehouses in 1934 was 66.0 per cent, according to an announcement made in April by F. J. Fitzgerald, chief statistician, Division of Special Tabulations, Bureau of the Census, Department of Commerce.

This figure is based on reports filed with the Bureau of the Census by an average of 1,103 warehouses reporting monthly across the year.

Announcement of the 1934 average occupancy makes possible the presentation of accompanying Graphs and Tables, giving the comparisons across the seven years which have elapsed since the Department of Commerce inaugurated this statistical program, at the beginning of 1928.

A study of these comparisons suggests that the 1934 figure of 66.0 per cent indicates that merchandise warehousing business on the whole was better in 1934 than it was in the preceding year. In 1933 the average occupancy was 62.5 per cent. Thus a gain of 3.5 per cent in 1934 over 1933 was reflected.

The average percentage for the peak year, 1929, was 72.2. That was the year in which the all-high monthly mark was attained—77.1 per cent in Novem-

ber, just prior to the Wall Street collapse which was destined to be a factor in the country's subsequent business depression. Examination of the graph at the bottom of this page shows how the "occupancy line" ascends at that period and then goes into a sharp recession which is not checked even briefly until April of 1930.

If executives in the industry find encouragement in the figures as here presented, such inspiration lies perhaps in the fact that, as shown in Table No. 1 on the opposite page, business was better in ten of the twelve months in 1934 as compared with 1933. The monthly averages reported for October and December of 1934 were lower than those recorded for the corresponding months of 1933, but for each of the other months the recorded average was higher.

The graph below visualizes how the country's average warehousing occupancy kept pace with the falling off of business in general following the financial market crash in that historic November. The "occupancy line" takes a consistently downward movement, except for temporary checks here and there, through 1930, 1931, 1932 and into 1933's month of March, when the figure, 60.2 per cent, was

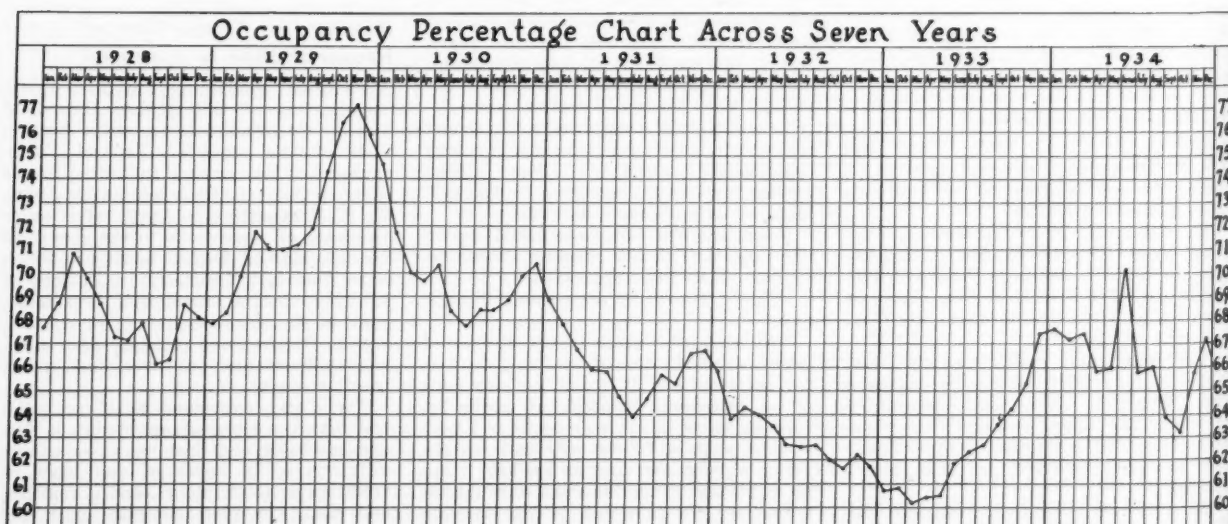


TABLE NO. 1—ENTIRE COUNTRY
OCCUPANCY AND TONNAGE, 1929, 1933 and 1934

	OCCUPANCY			TONNAGE									
	Percentage Occupied of Available Space			Total Volume Arriving			Total Entering Storage			Percentage Entering Storage			
	1929	1933	1934	1929	1933	1934	1929	1933	1934	1929	1933	1934	
January.....	67.9	60.7	67.6	628,291	304,033	376,216	460,090	247,952	293,814	73.2	81.6	78.1	January.....
February.....	68.3	60.8	67.2	652,680	252,973	371,508	468,557	204,712	284,817	71.8	80.9	76.7	February.....
March.....	69.9	60.2	67.4	724,600	280,313	410,675	551,208	225,273	333,210	76.1	80.4	79.4	March.....
April.....	71.8	60.4	65.9	776,755	316,452	391,085	589,802	252,814	315,610	75.9	79.9	80.7	April.....
May.....	71.0	60.5	66.0	738,177	362,262	412,381	572,827	286,311	337,055	77.6	79.0	81.7	May.....
June.....	71.0	61.9	70.1	659,595	396,709	401,177	499,584	321,098	322,435	75.7	80.9	80.4	June.....
July.....	71.2	62.3	65.8	689,816	395,164	453,537	521,362	325,893	380,278	75.6	82.5	83.8	July.....
August.....	71.9	62.7	66.0	730,178	376,274	389,459	553,737	306,796	319,592	75.8	81.5	82.1	August.....
September.....	74.3	63.5	63.9	722,914	433,245	376,401	541,566	345,911	301,334	74.9	79.8	80.1	September.....
October.....	76.3	64.2	63.2	949,785	470,272	446,660	753,848	384,181	367,520	79.4	81.7	82.3	October.....
November.....	77.1	65.2	65.7	744,477	502,413	440,220	559,718	406,703	370,951	75.2	80.9	84.3	November.....
December.....	75.9	67.4	67.1	599,891	428,897	445,289	451,178	355,261	386,826	75.2	82.8	86.9	December.....
Total.....	...	...	...	8,617,159	4,519,007	4,923,608	6,423,177	3,662,905	4,013,442	74.5	81.1	81.2	Total.....
Average.....	72.2	62.5	66.0	718,097	376,584	410,301	535,265	305,242	333,604	74.5	81.1	81.2	Average.....

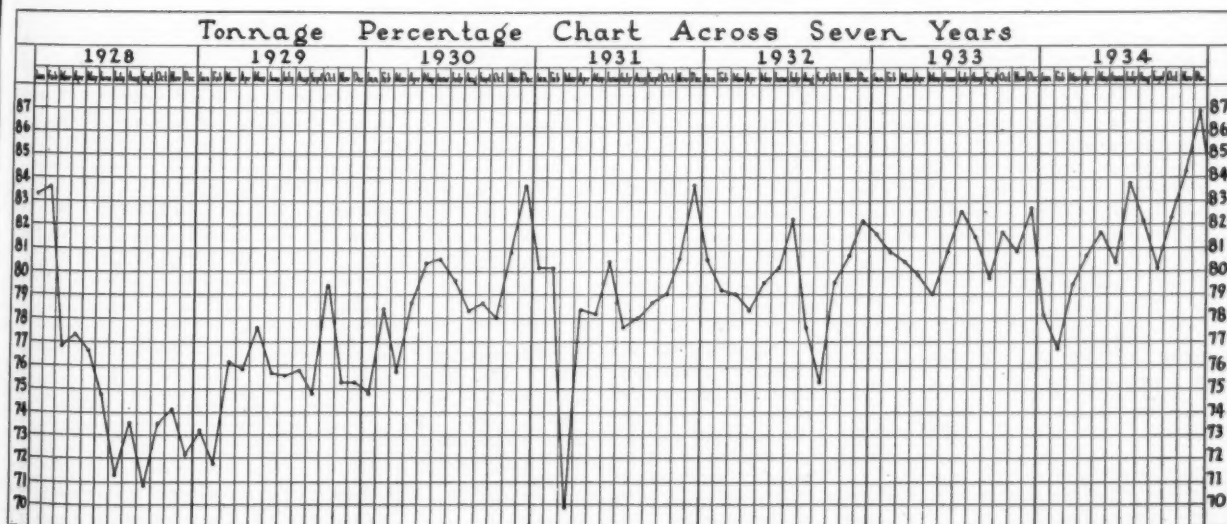
the lowest one in the records.

It was on the fourth day of that March that Franklin D. Roosevelt entered the White House with the promise of the New Deal on his lips. In the following month the average warehousing occupancy was better, and the "occupancy line," as the graph shows, takes an upward turn to 67.6 per cent in January of 1934 before recession again comes. At the end of December of 1934 the reported average was 67.1, or 6.9 per cent better than the all-low mark of March in 1933.

A glance at the graph shows that usually in the spring of each year, and again some time in the fall, occupancy is apt to improve. The "line" moves upward, in 1928, to the end of March before being checked; and, after recessions, it moves upward to the end of November, before another recessions. In

1929, April and November are the favorable months. In 1930 they are May and December. The year 1931 proved an exception in the spring, but the usual November-December upward movement is shown. In 1932, there is a slight upward movement in May and another in November before recessions come. May and December were again the favorable months in 1933. In 1934 there were spurts in March, June and December.

Invariably the "line" shows how, after the upward movement has attained its peak in the fall of each year, recession at once occurs, carrying over into the early months of the following year. This was repeated at the close of 1934, as the Dec. 31 mark of 67.1 was followed by a Jan. 31, 1935, mark of 66.3 and by a provisional mark of 65.2 on the last day of this past February.



Current Release

THE April release of the Bureau of the Census shows average occupancy (provisional) for the entire country, on Feb. 28, as 65.2 per cent.

This is a recession of 1.1 per cent, as compared with the revised and final figure, 66.3, for the final day of January.

February's provisional 65.2, compares with 67.2 per cent on the last day of February of 1934, or a decline of 2.0 per cent.

The last-day-of-February percentages across eight years (with 1935's provisional) are as follows:

1928	1929	1930	1931	1932	1933	1934	1935
68.7	68.3	71.7	67.9	63.8	60.8	67.2	65.2

The tonnage figures in the accompanying January-February table indicate that during February a smaller percentage (by 2.2 per cent) of goods arriving at the reporting warehouses entered storage (out of total volume received) than in the earlier month.

In February, 342,401 tons (this figure being provisional) arrived at 979 reporting warehouses; of this, 276,666 tons, or 80.8 per cent, entered storage, the balance being delivered on arrival.

In January the total (final) arriving volume at 980 reporting warehouses was 415,686 tons, of which 83.0 per cent, or 344,859 tons, entered storage, the balance being delivered on arrival.

The provisional 80.8 per cent for this past February compares as follows with the February percentages of the seven preceding years:

1928	1929	1930	1931	1932	1933	1934	1935
83.6	71.8	78.4	80.1	79.2	80.9	76.7	80.8

Occupancy

THE decline of 2.2 per cent in the country's average occupancy on Feb. 28 last as compared with the mark recorded for the final day of February of 1934 was not reflected in Massachusetts, in the New York metropolitan district as a whole, and in Ohio, Illinois outside of Chicago, Minnesota outside the Twin Cities, St. Louis, Nebraska, Kansas, West Virginia, the Carolinas, Georgia and Florida, Alabama and Mississippi, Louisiana, Montana, Arizona and New Mexico, Washington (State), and Oregon, all of which reported average gains. The most pronounced advances were 15.5 per cent in Montana and 15.3 per cent in Kansas. The sharpest recessions were 30.8 per cent in Utah and 27.3 per cent in New Jersey outside the New York metropolitan district.

The table which follows compares the provisional Feb. 28 occupancy percentages of 1935 with those for the final day of February of 1934; and with those of the last day of February of 1929, which was the peak year:

	Occupancy End of February			
	1929	1934	1935	
Massachusetts-Vermont	40.8			
Massachusetts		57.2	59.7	
Connecticut-Rhode Island	63.3			
Conn.-Vt.-New Hampshire		71.7	68.1	
Rhode Island		77.6	50.7	

Table No. 2 Occupancy Percentages 1929-1933-1934 by States

In the 1933 columns the Connecticut percentages given are the combined percentages of Connecticut and New Hampshire in the January column; and the combined percentages of Connecticut, New Hampshire and Vermont in the other eleven columns.

In the 1933 and 1934 columns the percentages given for Arkansas and Oklahoma are the averages for the two States combined.

	Occupancy End of February			
	1929	1934	1935	
New York Met. Dist.	55.3	69.6	69.8	
Brooklyn	41.3	57.9	72.0	
Manhattan	67.6	74.3	68.2	
Nearby N. J. & other	72.5			
Nearby New Jersey		87.7	71.4	
All other		42.3	27.1	
New York State	51.6			
N. Y. State except Met. Dist.		57.7	54.2	
New Jersey State	73.6			
N. J. State except Met. Dist.		61.9	34.6	
Pennsylvania	72.6	67.5	65.5	
Ohio	85.6	68.9	69.0	
Indiana	77.3	56.1	53.5	
Illinois	76.6			
Illinois except Chicago		71.6	73.9	
Chicago	77.0	81.2	70.3	
Michigan	69.5	77.5	77.2	
Wisconsin	85.0	55.0	56.9	
Minnesota	80.7			
Minn. except Mpls. & St. Paul		58.0	63.1	
Minneapolis & St. Paul	81.7	82.5	72.6	
Iowa	72.3	52.0	46.9	
Missouri	86.2			
Mo. except St. Louis		68.0	64.9	
St. Louis		84.5	81.5	
No. & So. Dakota	93.8	83.9	82.4	
Nebraska	75.4	60.0	68.9	
Kansas	82.9	56.6	71.9	
Del.-Md.-D. C.	54.7	70.9	67.6	
Virginia & W. Va.	69.1			
Virginia		81.5	67.9	
West Virginia		65.9	80.6	
No. & So. Carolina	64.3	67.3	71.8	
Georgia-Florida	82.7	69.0	75.8	
Kentucky-Tennessee	74.3	87.3	80.6	
Alabama-Mississippi	84.5	64.1	78.1	
Ark.-La.-Okla.	82.9			
Arkansas-Oklahoma		75.0	70.8	
Louisiana		66.7	71.6	
Texas	86.6	55.2	41.3	
Ida.-Wyo. Mont.	73.9			
Idaho-Wyoming		60.2	55.8	
Montana		58.6	74.1	
Ariz.-Utah-Nev.-N. M.	80.7			
Arizona & New Mexico		65.1	68.0	
Utah		89.1	58.3	
Colorado	76.2	60.8	52.7	
Washington	70.0	53.0	63.1	
Oregon	66.5	61.4	64.2	
California	73.1	58.8	58.2	
Average for U. S.	68.3	67.2	65.2	
Warehouses reporting	1227	1115	10.89	

Comparing the Feb. 28 occupancy percentages (provisional) with the final ones for Jan. 21 (as shown in the Government's January-February table on the opposite page), it is disclosed that the decline of 1.1 per cent for the entire country was reflected in Massachusetts, in a small part of the New York metropolitan district, and in Ohio, Illinois out-

(Concluded on page 12)

	January			February		
	1929	1933	1934	1929	1933	1934
Massachusetts-Vermont	48.1			48.0		
Conn.-Vt.-N.H.		68.5			71.7	
Massachusetts		50.3	58.9		49.0	57.3
Connecticut-Rhode Is.	63.3			63.3		
Connecticut		69.2			66.1	
Rhode Island		63.2	78.9		64.6	77.6
New York Met. Dist.	55.4	59.7	69.0	55.3	61.2	69.6
Brooklyn	41.7	48.7	58.2	41.3	50.4	57.9
Manhattan	67.0	57.8	70.6	67.6	58.3	74.3
Nearby N. J. & Others	72.7			72.5		
Nearby New Jersey		80.6	88.0		82.9	67.7
All Other		63.9	42.7		64.5	42.1
New York State	51.9			51.6		
N.Y. Sta., exc. Met. Dist.		57.0	62.1		55.7	67.7
New Jersey State	72.6			73.6		
N.Jer'ySta., exc. Met. Dist.		50.9	44.6		49.5	61.5
Pennsylvania	69.5	63.0	67.0	72.6	56.6	67.5
Ohio	86.4	63.9	70.2	85.6	62.1	68.9
Indiana	74.0	58.8	57.8	77.3	58.3	66.1
Illinois	75.7			76.6		
Illinois, except Chicago		64.4	72.2		65.5	71.6
Chicago	76.0	80.2	80.2	77.0	58.0	81.2
Michigan	67.6	61.4	76.2	69.5	58.9	77.5
Wisconsin	84.2	52.0	64.5	85.0	60.4	55.0
Minnesota	80.8			80.7		
Minn. ex. M'pls & St. P.		74.9	63.8		61.2	58.0
Minneap. & St. Paul	81.4	81.1	83.4	81.7	80.2	82.5
Iowa	71.4	45.4	60.4	72.3	46.3	32.8
Missouri	80.8			86.2		
Missouri exc. St. Louis		60.8	72.3		60.3	68.0
St. Louis	77.1	66.8	72.9	84.5	70.5	71.2
N. and S. Dakota	93.9		78.0	93.8	66.6	83.9
North Dakota		73.9				
South Dakota		98.7				
Nebraska	81.1	54.8	65.9	75.4	51.9	60.0
Kansas	78.3	65.5	72.0	82.9	61.2	56.6
Del., Md., & Dist. Col.	51.3		60.7	54.7		70.9
Delaware & Maryland		68.7			68.8	
District of Columbia		67.6			62.7	
Virginia & W. Virginia	68.6			69.1		
Virginia		57.7	83.7		54.8	81.5
West Virginia		78.9	81.8		87.9	68.9
N. and S. Carolina	68.9	60.9	68.5	64.3	56.8	67.3
Georgia and Florida	83.1	57.7	63.0	82.7	57.6	69.0
Kentucky & Tennessee	76.0	60.3	85.6	74.3	55.6	67.3
Alabama & Mississippi	83.4	63.9	60.1	84.5	66.1	64.1
Ark., Louisiana & Okla.	72.7			82.9		
Arkansas		60.9	75.7		67.1	73.0
Louisiana		61.8	65.8		52.1	66.7
Oklahoma		60.9	75.7		67.1	73.0
Texas	86.4	73.5	58.5	86.6	72.1	58.2
Idaho, Wyo., Montana	71.1			73.9		
Idaho, Wyoming		58.9	79.3		71.7	60.2
Montana		87.4	69.9		85.2	58.6
Ariz., Utah, Nev., N. Mex.	77.1			80.7		
Arizona, New Mexico		62.5	55.7		70.0	68.1
Utah		95.3	80.2		92.4	89.1
Colorado	73.4	60.3	62.4	76.2	64.3	60.6
Washington	72.9	60.4	51.0	70.0	60.2	53.0
Oregon	66.5	57.5	64.2	66.5	58.1	61.4
California	76.9	54.4	59.9	73.1	53.4	58.8
Average for U. S.	67.7	60.7	67.6	68.3	60.8	67.2

February

1900 1901 1902 1903 1904
0 71.7
49.0 57.3
3
66.1
64.6 77.5
61.2 69.5
50.4 57.5
58.3 74.3
82.9 67.7
84.5 42.3
55.7 57.7
49.5 61.5
56.8 67.5
62.1 68.8
58.3 56.1
65.5 71.6
58.0 81.2
58.9 77.5
60.4 55.0
61.2 58.0
80.2 82.5
46.5 52.0
50.3 68.0
65.6 71.3
66.6 83.9
1.9 60.0
1.2 56.6
70.9
2.8
2.7
8.8 81.3
9.9 65.9
8.8 67.3
6.0 60.0
6.6 87.3
1.1 64.1
1.7 50.0
1.1 66.7
1.1 75.0
1.1 55.3
7.0 60.2
2.5 58.6
65.1
89.1
60.8
53.0
61.4
58.8
67.3

March			April			May			June			July			August			September			October			November			December			
1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	1920	1933	1934	
48.9			50.1			52.1			52.6			56.8			57.5			55.3			54.3			52.8			50.8			
		71.2			80.5			83.1			54.5			45.3			51.7			49.6			46.5			63.8		70.1		
	49.6	57.8		49.6	60.6		48.9	60.3		52.3	62.6		58.3	61.2		60.1	63.0		60.4	62.8		56.6	64.7		58.3	63.0		60.2	63.2	
66.6		65.7			65.9			65.9			59.1			58.7			61.0			59.5			55.9			50.9				
	66.6		61.2			58.9			45.6			63.8			46.5			43.9			44.2			61.7			66.4			
	65.9	76.6		69.1	70.3		69.9	62.0		76.4	61.4		78.8	56.2		80.7	50.5		80.3	50.1		81.1	49.9		80.7	51.4		78.7	54.1	
64.7	61.2	71.4	76.5	62.2	71.5	76.4	61.6	72.2	78.3	63.6	71.8	78.9	64.5	72.8	75.3	64.6	72.5	84.3	64.0	66.1	82.1	64.0	59.8	84.2	63.1	66.2	83.5	67.9	72.1	
58.2	51.0	59.5	79.1	51.0	63.8	78.3	51.4	69.4	80.9	53.3	70.3	80.1	55.9	74.9	71.7	56.2	73.3	76.9	54.9	65.7	76.5	54.7	57.7	86.2	49.3	68.9	86.4	57.9	71.8	
66.8	87.7	76.2	68.8	60.1	75.6	69.9	61.7	74.0	70.8	63.1	72.5	75.8	63.9	71.6	74.9	61.2	71.0	88.1	63.6	67.2	84.9	65.0	61.5	78.2	68.7	62.4	78.9	69.0	72.1	
75.0		76.8			77.7			78.5			78.7			82.1			82.2			80.4			84.6			81.9				
	82.5	89.7		83.1	83.2		79.9	79.7		82.4	77.6		81.5	74.0		84.5	76.6		82.3	69.1		80.7	65.0		84.9	68.8		85.7	76.9	
	63.2	42.6		50.9	42.7		48.9	34.1		53.3	34.1		40.3	30.1		40.0	30.2		41.0	30.1		40.3	29.5		39.3	29.9		39.3	29.3	
61.6		74.3			74.3			76.6			77.7			72.1			82.8			80.9			82.7			82.2				
	51.6	54.0		55.0	50.6		54.1	49.7		58.6	49.1		52.6	51.4		55.8	51.8		54.6	54.6		61.1	56.1		65.3	60.4		64.2	56.3	
76.3		78.0			78.1			78.5			78.9			82.3			83.0			82.0			84.0			81.2				
	47.4	45.3		46.8	42.4		47.1	44.8		50.8	42.0		49.6	38.6		53.1	39.0		48.6	37.7		48.6	38.6		46.3	39.5		46.7	37.2	
72.0	55.0	65.1	71.2	55.6	64.3	71.6	53.8	64.2	70.1	55.7	66.1	70.6	60.6	65.3	70.1	60.2	65.2	70.0	66.8	65.4	75.5	66.6	65.9	73.9	64.6	66.3	71.7	66.8	66.4	
88.0	62.3	70.1	87.8	62.5	70.1	89.2	63.1	70.2	81.1	64.8	70.5	89.4	64.1	70.4	89.9	64.7	71.6	90.5	64.5	71.4	91.5	67.6	73.3	92.1	67.9	72.7	90.9	68.3	72.3	
80.8	59.3	57.9	81.7	62.4	58.3	80.3	65.7	56.2	80.0	65.1	55.4	76.1	64.9	54.1	82.2	61.9	53.9	82.1	63.0	54.5	82.7	62.8	55.5	80.7	60.9	55.3	79.4	60.6	47.1	
78.2		78.7			78.6			81.1			82.2			86.1			86.3			87.0			83.4			82.2				
	64.8	71.0		63.0	70.8		68.4	70.7		66.6	73.6		65.9	67.9		73.6	70.1		75.5	69.4		75.5	70.6		72.5	75.0		73.4	74.7	
78.7	56.5	79.6	79.1	57.1	79.0	79.0	62.3	76.2	81.9	61.7	70.4	83.2	67.1	75.8	87.7	67.1	74.1	87.8	72.5	72.1	88.2	72.2	75.5	85.0	73.4	76.8	84.0	76.9	72.9	
66.0	60.0	79.1	67.6	56.6	80.1	70.9	58.9	68.8	71.8	61.1	72.0	66.2	62.4	70.4	69.0	63.7	74.4	71.1	61.6	71.7	73.2	68.8	74.0	69.7	73.7	77.5	68.3	71.9	76.0	
85.2	61.7	55.1	84.5	63.0	57.9	88.2	62.7	59.5	89.7	59.9	61.6	92.1	54.5	63.5	92.1	58.0	62.7	92.6	61.2	59.9	92.0	61.9	59.0	84.7	64.0	57.8	86.4	65.2	56.2	
79.0		76.9			71.5			73.2			73.1			78.5			82.4			84.6			86.4			85.3				
	60.6	55.6		53.6	54.8		54.4	45.7		72.1	41.1		73.3	49.6		70.3	59.4		73.0	59.6		77.3	53.4		75.0	86.2		71.8	75.1	
79.8	76.7	82.7	77.5	75.7	81.7	71.6	76.3	83.4	72.9	76.4	82.6	72.4	75.8	79.6	77.4	74.9	76.0	82.9	75.3	74.5	84.5	77.7	73.2	86.3	79.2	75.1	85.1	83.5	75.6	
68.8	49.7	52.9	67.9	48.7	49.7	69.2	50.3	47.4	67.4	54.3	46.1	66.4	53.5	44.8	68.2	56.2	43.5	70.1	58.9	42.0	73.1	63.9	49.0	73.8	67.1	51.0	78.5	65.9	54.9	
82.4		81.1			82.0			78.8			75.4			77.3			73.2			82.9			85.6			83.5				
	59.9	65.4		62.2	60.6		62.4	60.7		61.1	55.1		60.5	53.6		59.5	55.2		59.2	54.9		59.2	70.7		69.4	65.8		72.6	62.4	
83.1	63.0	71.4	81.7	60.7	71.5	82.1	66.4	77.1	70.9	67.8	77.0	76.8	66.1	77.7	78.1	62.7	78.3	78.0	67.8	81.0	82.5	69.9	80.3	83.2	70.8	82.3	78.3	70.9	82.4	
93.7	64.5	80.2	93.3	63.4	79.7	92.8	61.7	75.1	93.8	60.6	70.4	93.1	56.6	72.4	92.8	50.0	66.5	92.4	56.8	67.6	94.4	58.6	73.4	93.8	68.2	82.5	92.9	77.2	86.3	
	74.2	52.9	61.4	69.8	55.2	63.3	69.7	53.2	62.0	67.6	54.4	59.6	64.6	55.2	53.4	64.8	60.4	57.8	63.3	62.0	62.6	77.5	57.7	58.1	82.0	61.6	59.9	89.2	68.4	65.2
83.0	52.6	61.3	84.8	52.2	60.6	80.0	51.4	85.8	79.2	51.2	85.6	83.0	43.3	77.6	82.3	53.5	72.5	82.5	47.6	71.7	82.0	47.4	70.2	83.1	60.7	71.1	87.5	65.2	79.2	
53.4		67.1	53.4		66.3	51.6		68.1	56.1		67.4	52.1		68.5	57.5		71.4	59.0		68.3	61.0		70.3	60.4		69.5	59.7	61.0	67.5	
	62.0		60.7		56.5			53.6			40.8			42.1			51.8			56.0			55.8							
	62.7		63.3		66.4			66.4			78.7			85.9			86.1			85.5			84.4			84.4				
69.3		70.4			70.4			70.4			70.5			70.7			71.0			71.1			70.7			70.7				
	60.5	87.8		71.9	85.6		73.3	61.1		77.4	60.4		49.6	80.7		57.0	57.8		83.3	61.9		60.0	55.9		60.7	60.4		82.2	62.9	
	79.7	79.4		83.9	82.9		83.9	82.3		84.4	85.5		89.8	85.2		87.1	82.6		88.6	84.4		86.2	84.4		82.0	83.9		81.0	82.3	
65.1	59.8	71.7	68.7	56.0	68.2	68.1	55.9	69.5	66.8	58.8	62.4	64.9	58.0	58.2	61.6	59.2	61.0	64.3	65.9	57.8	68.4	71.3	63.8	75.6	75.4	70.3	70.1	69.7	73.6	
77.8	63.7	70.6	76.0	62.8	64.1	75.7	51.4	57.9	77.8	55.9	52.8	76.7	57.5	52.4	77.2	60.9	43.5	78.5	63.9	44.2	82.2	67.3	50.4	79.8	65.8	51.7	73.0	66.0	72.2	
74.6	59.9	83.3	76.8	62.4	84.7	77.3	62.0	85.6	75.7	63.0	91.8	80.4	93.9	87.9	73.7	90.9	82.7	73.5	88.6	86.2	70.0	93.4	83.6	70.8	92.8	77.2	72.1	84.7	75.9	
77.5	53.4	68.7	81.4	57.4	61.7	75.9	56.2	69.7	69.9	45.4	77.9	69.9	57.5	71.8	67.2	61.4	68.9	71.1	60.9	64.5	68.0	60.6	69.2	78.3	66.2	69.4	67.1	61.2	70.6	
79.8		80.3																												

side Chicago, Nebraska, West Virginia, Georgia and Florida, Kentucky and Tennessee, Alabama and Mississippi, Arkansas and Oklahoma, Arizona and New Mexico, and Washington, in all of which the reported average was higher.

Tonnage

As already pointed out, the percentage of volume reported as having entered storage this past February, out of total volume arriving, was provisionally larger (by 4.1 per cent) than the average recorded for February of 1934.

Across eight years the February percentages (1935's being provisional) by divisions are as follows:

	Percentages Entering Storage—February							
	1928	1929	1930	1931	1932	1933	1934	1935
New Eng.	75.5	82.6	68.6	78.8	66.7	83.3	70.3	82.0
Mid. Atl.	94.3	74.0	90.5	88.3	93.9	91.8	93.3	94.1
E. No. Cent.	87.8	83.8	86.1	82.7	77.3	80.0	81.2	84.2
W. No. Cent.	70.4	78.3	73.8	75.6	75.4	63.1	70.9	71.0
So. Atl.	78.5	50.2	81.3	85.0	80.3	82.9	77.0	74.1
E. So. Cent.	78.6	78.7	71.0	73.7	68.9	67.2	71.4	67.7
W. So. Cent.	72.5	80.5	72.3	79.6	70.5	71.7	61.6	69.2
Mountain	60.0	63.5	58.0	61.5	64.6	70.2	45.9	52.9
Pacific	84.2	64.6	65.9	68.4	64.6	68.4	61.0	59.9
Country	83.6	71.8	78.4	80.1	79.2	80.9	76.7	80.8

Comparing this past February's provisional percentages with the final ones reported for January, it is seen that the recession of 2.2 per cent was reflected in all sections except one—West South Central.

By divisions, the comparisons follow:

	Percentage Entering Storage		
	Jan.	Feb.	Change
New England	85.1	82.0	-3.1
Middle Atlantic	95.5	94.1	-1.4
East North Central	84.6	84.2	-0.4
West North Central	78.1	71.0	-7.1
South Atlantic	76.2	74.1	-2.1
East South Central	71.0	67.7	-3.3
West South Central	63.0	69.2	+6.2
Mountain	54.3	52.9	-1.4
Pacific	64.6	59.9	-4.7
Entire country	83.0	80.8	-2.2

PUBLIC MERCHANDISE WAREHOUSING

JANUARY - FEBRUARY, 1935

Statistical data on occupancy and tonnage during the months of January and February, 1935, as reported to the Bureau of the Census

DIVISION AND STATE	Per Cent of Floor Space Occupied		TONNAGE							
			Received During Month		Equivalent No. of Lbs. per Sq. Ft.		Delivered on Arrival		Equivalent No. of Lbs. per Sq. Ft.	
	Feb.	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.	Jan.
NEW ENGLAND (Total)	59.2	59.3	6,634	9,708	5.3	7.7	1,458	1,694	1.2	1.3
Vermont, New Hampshire and Connecticut	68.1	69.9	1,044	831	6.6	5.2	369	461	2.3	2.9
Massachusetts	59.7	58.7	3,979	6,801	4.6	7.8	869	958	1.0	1.1
Rhode Island	50.7	55.5	1,611	2,076	7.2	9.3	220	275	1.0	1.2
MIDDLE ATLANTIC (Total)	67.5	68.7	105,708	148,878	15.0	21.1	6,639	6,976	0.9	1.0
New York Metropolitan District	69.8	71.0	83,411	126,544	15.9	24.1	2,581	2,270	0.5	0.4
Brooklyn	72.0	72.8	47,518	54,842	15.8	18.3	1,181	1,400	0.4	0.8
Manhattan	68.2	69.9	16,360	26,526	28.3	41.1	42	66	0.1	0.1
Nearby New Jersey	71.4	72.7	19,382	44,985	13.0	30.3	1,358	804	0.9	0.3
All other	27.1	26.9	151	191	1.3	1.6				
New York, except Metropolitan District	54.2	56.6	8,968	10,096	13.7	15.4	2,379	3,265	3.6	8.0
New Jersey, except Metropolitan District	34.6	36.4	415	677	4.4	7.1	10	29	0.2	0.3
Pennsylvania	65.5	66.2	12,911	11,561	12.2	10.8	1,660	1,412	1.6	1.1
EAST NORTH CENTRAL (Total)	68.2	69.6	62,745	68,659	18.3	20.0	11,806	12,492	3.4	3.6
Ohio	69.0	68.7	15,424	14,594	17.7	16.6	2,864	3,404	3.3	3.9
Indiana	55.5	53.6	4,144	5,435	13.6	17.9	1,619	1,561	5.3	5.1
Illinois, except Chicago	73.9	70.2	1,760	2,089	8.5	10.1	2,335	2,486	11.3	12.0
Chicago	70.3	72.2	16,671	20,601	19.7	24.4	1,118	1,051	1.3	1.3
Michigan	77.2	81.3	20,290	21,080	24.9	26.0	2,005	2,022	2.5	2.5
Wisconsin	50.9	53.2	4,456	4,860	11.4	12.5	1,857	1,967	4.8	5.0
WEST NORTH CENTRAL (Total)	69.5	71.4	22,298	25,343	14.8	16.5	9,107	7,109	6.0	4.8
Minnesota, except Minneapolis and St. Paul	63.1	72.8	900	746	12.1	10.0	466	574	6.2	7.7
Minneapolis and St. Paul	73.6	75.3	3,126	3,754	18.7	22.4	1,102	922	6.6	5.5
Iowa	46.9	50.2	2,215	2,486	10.5	11.8	994	772	4.7	3.7
Missouri, except St. Louis	64.9	65.1	5,592	6,265	17.8	20.0	962	1,063	3.1	3.5
St. Louis	81.3	83.1	3,611	5,326	11.1	16.3	433	354	1.3	1.1
North and South Dakota	82.4	84.3	1,970	2,694	9.9	13.6	1,087	1,174	8.5	8.9
Nebraska	68.9	68.8	2,533	3,052	18.6	18.2	1,646	1,613	12.0	9.6
Kansas	71.9	75.9	2,331	1,020	27.9	13.0	2,417	607	28.9	7.7
SOUTH ATLANTIC (Total)	69.8	70.5	31,605	40,351	21.5	27.4	11,075	12,622	7.5	8.6
Maryland, Delaware and Dist. of Columbia	67.6	68.4	14,582	15,385	14.2	15.0	3,819	4,839	3.7	4.7
Virginia	67.9	72.5	2,474	4,371	4.1	72.9	1,056	1,577	17.6	28.2
West Virginia	80.6	79.3	1,997	1,662	23.5	19.6	317	378	3.7	3.2
North and South Carolina	71.8	74.1	2,116	5,370	19.5	49.6	455	729	4.2	6.7
Georgia and Florida	75.8	75.4	10,436	13,563	54.9	70.2	5,428	5,199	28.5	26.9
SOUTH CENTRAL (Total)	55.4	56.5	32,828	33,782	22.8	23.7	14,815	18,761	10.3	13.2
Kentucky and Tennessee	80.6	76.5	4,268	3,362	20.2	22.9	1,791	1,347	12.2	9.2
Alabama and Mississippi	78.1	74.7	1,464	2,712	22.7	42.1	950	1,114	14.8	17.3
Arkansas and Oklahoma	70.8	70.3	8,618	7,582	42.3	37.2	7,338	6,597	36.0	32.4
Louisiana	71.6	73.0	12,429	14,467	19.9	23.8	854	5,276	1.4	8.7
Texas	41.3	43.7	6,049	5,659	15.1	14.1	3,882	4,427	9.7	11.0
MOUNTAIN AND PACIFIC (Total)	59.5	60.5	14,848	18,138	9.7	11.8	10,835	11,173	7.1	7.2
Idaho and Wyoming	58.8	56.1	322	493	9.2	14.2	694	762	19.9	21.9
Montana	74.1	74.7	344	270	8.4	7.8	395	348	9.7	10.1
Arizona and New Mexico	68.0	66.3	606	565	6.8	5.8	1,337	1,675	15.0	17.3
Utah	58.3	61.8	1,539	1,584	34.2	35.3	70	47	1.6	1.0
Colorado	52.7	58.1	1,261	1,326	8.3	8.7	1,124	740	7.4	4.9
Washington	63.1	60.7	1,999	1,712	11.5	9.9	2,149	2,396	12.4	13.8
Oregon	64.2	66.1	244	344	5.3	7.4	261	169	5.6	3.7
California	58.2	59.4	8,533	11,844	9.0	12.3	4,805	5,036	5.1	8.2
United States (Total)	65.2	66.3	276,666	344,850	15.6	19.5	65,735	70,827	3.7	4.9

The figures for January have been revised; those for February are preliminary.

Colorado Creates Portable Port of Entry for Trucks and Reduces Road Tax

WHEN the Colorado State Legislature adjourned in April, the State's trucking industry had forged ahead progressively by virtue of five measures important to them having been enacted into law. Signed by Governor Johnson, they are:

Senate Bill 293, reducing road tax from 5 to 3 mills, or 40 per cent.

Senate Bill 294, making it necessary for contract haulers to show, before permits can be obtained, that their proposed operations will in no way drain the tonnage of common carriers already operating in the same field. Also, contract haulers must adhere to such rates as are set for common carriers.

Senate Bill 296, which provides that commercial carriers must pay the same ton mile tax of three mills.

Senate Bill 6, which creates the highway courtesy patrol. This is the port of entry measure.

Senate Bill 653, a uniform Code measure for regulation of vehicle operations on the highway and which rule from the highways some of the "\$25 down equipment".

No. 6 makes it possible for the motor patrol to set up ports of entry at its discretion, this being a "portable port of entry" proposition. This was thought to be more efficient than if definite ports were designated. It is now probable that

the port of entry law will become a regional proposition, inasmuch as Kansas and Arizona now have it, as has Utah. Some leaders of the industry in the Mountain States predict that if port of entry measures are passed in other states of the region it may lead to worthwhile national regulation of this sort.

"Now that the legislation we worked so hard for has been enacted, we've started a wide-spread educational program designed to bring the meaning and operation of the bills to everyone concerned, in all parts of the State," according to J. F. Rowan, Denver, executive secretary of the Colorado Warehousemen's Association.

**SALES
PROVE** ✓

Highway

**Leads the Field in
TRAILERS for 1935!**

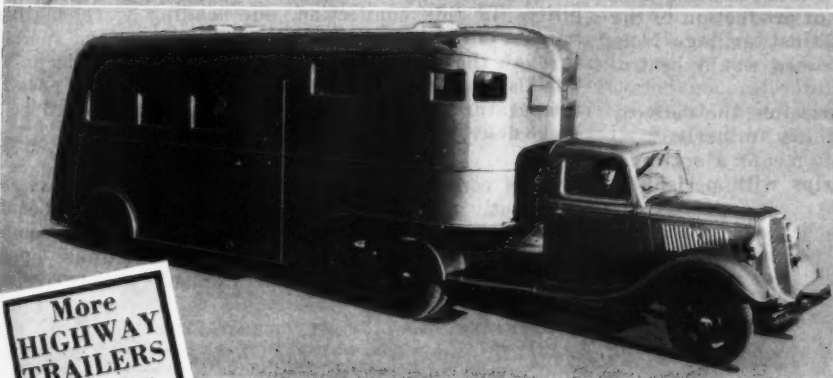


**THE ONLY
TRAILER AT ANY
PRICE THAT
GIVES YOU—**

- Sound Trailer Engineering
- Rugged Construction
- Alligator Frame
- Patented Features
- The "Latest" in Streamline Custom Body Designs
- Trailer Units and Bodies especially designed for your particular requirements — unequaled low cost per mile of operation

**Nationally Known Users
Everywhere Know the Extra
Value of Highway Trailers**

A nation-wide sales and service organization with branches and distributors in all principal cities will provide you with "engineered transportation specifications" for your particular transportation requirements.



**More
HIGHWAY
TRAILERS
in use than
any other
make.**

HIGHWAY TRAILER CO.

EDGERTON, WISCONSIN

Branches and Distributors in All Principal Cities



Motor Truck REFRIGER



What is being done and should be accomplished
by operators in the haulage of perishables



FUTURE GROWTH HAS UNLIMITED FIELD

By F. Eugene Spooner

MOTOR truck refrigeration as a means of preserving food qualities in transit over the road has within the past few years gained rapidly in use—so much so, in fact, that fully 6 per cent of the motor freight and warehouse trucks in use are equipped to haul perishables. In addition, recognition must be made for the thousands of refrigerated trucks operated privately by packing houses, producers of frozen food products, etc.

It is only natural to attribute major importance to this type of service rendered because of the twenty-billion-dollar food market annually, 75 per cent, or 16½ billion dollars, is spent for perishable foods.

The greater part of this vast supply must at some time during its movement from the point of production to the consumer be vigilantly protected against spoilage from the elements, etc. Otherwise the losses would be tremendous.

Truck refrigeration now makes possible the delivery of delicacies to remote sections which formerly were denied such service. And it is by no means a sectional service, because transcontinental trips with perishable loads have been proven practicable.

A number of companies have branched out in this service so that regular routes extend out as far as 1,200 miles. Numerous companies tie in their service with others to bring in successfully loads such as frozen fish over routes which measure about 1,700 miles.

In many cases such distances are covered not so much because of the lack of rail facilities or railroad refrigeration service as to save time and to cut rail costs.

That so many warehouse companies are now providing this service is a tribute to their far-sightedness in recognizing the vital need of customers whose products must reach the markets quickly and in good condition.

The whole gamut of foodstuffs comes into this distribution picture. The output alone from the cold storage

warehouses daily that is loaded on trucks is enough to conjure with, but that tonnage coupled with that from the production origin makes the total a figure of greater moment.

Regardless of how this 16½-billion-dollar perishable food production gets to the market places, it must at some time be handled by motor trucks and trailers owned by the warehouses or motor freight operators.

Although truck refrigeration has reached its peak of development and is acknowledged to provide the most satisfactory and most economical way for distributing most perishables essential for the public welfare, by no stretch of the imagination can it be said that all those in a position to give a service of this character are doing so.

Nor can it be said that all of those who profess to be giving a refrigerating service are doing so, in the strict sense of the word. In this regard, there is a distinct line of demarcation to be drawn between what can be secured with just an insulated body and one which is properly refrigerated. Also, there is much to be said on the question of pre-cooling of the body and the condition of the load before entering the body.

Upon such problems rests the question of responsibility. In this connection, one leading warehouseman has not only meticulously guarded against food spoilage through the use of modern refrigerating equipment but has also carried insurance against losses due to possible temperature failure or any loss occasioned by failure to make delivery on time.

SUCH companies are the ones whose business has constantly grown so as to make necessary additional equipment. They are the ones which seem able to combat chiseling, always rampant in a field that offers opportunities for good business. And chisellers there are and always will be. But as in any business endeavor it is always the exceptional concern which survives such attacks. And what makes a concern exceptional is the plus effort put into the work performed, and that is quality. In the long run, quality will prevail over price.

How, then, can a warehouseman or motor freight operator willing to make a penny in the truck refrigeration field overcome the sales resistance set up by an operator quoting rates far below cost. Either the low-rate man has found a way to operate economically, or he is heading for disaster. If he has found a way to give

RATION

a service that is satisfactory and which is a money-maker for him, then he should be copied.

It will probably be found that, from the viewpoint of truck chassis, insulation, type of refrigerant, and perhaps general weight reduction or ability to carry a greater payload, the low-rate operator might be copied.

Be that as it may, it must be assumed that all of the foregoing factors determine to a great extent just what progress is going to be made in this field.

To carry 1,800 to 2,000 pounds of ice to perform a refrigerating job which can be done with only 200 pounds or even less of carbene dioxide or dry ice, or to use insulating material which from a weight standpoint may be ten times heavier than some other material that could be used, is just so much waste from an operating cost standpoint and should certainly be eliminated.

To some extent, restrictive truck legislation is going to force operators to replace equipment which puts an undue premium on payload. Weight limitations and higher registration fees must be considered.

MOST operators are cognizant of the opportunities offered through the use of modern equipment. Eventually those not now possessing this equipment will do so. And then there is the purchasing which will be made by operators who do not now recognize their opportunities. Altogether, there is a market potentiality of tremendous proportions, once this latent buying starts.

That the motor truck, trailer, body, and refrigerating equipment manufacturers are prepared to do their share in helping this service broaden in the right way is testified to by the wide choice of products offered and the great amount of educational literature published.

As a result of this competition among manufacturers there has been considerable progress in improved design, all in keeping with the needs of the times.

In the following pages will be found the statements



of a few companies which have products used in truck and trailer refrigeration. In addition there has been included general information of a practical character from which those interested in the subject may glean facts that will be of some material help.



STATOTHERM Widens Field of Perishable Food Trucking

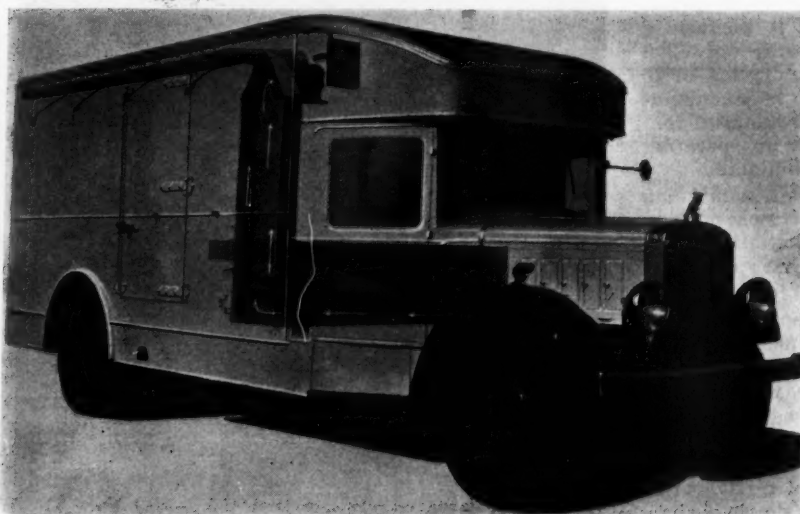
Affords practical and economical means of holding temperatures for indefinite periods of transit

MARKET analysts have long recognized that highway transport of perishable food products has suffered considerable restriction because of the lack of a practical and economical means of holding load temperatures fixed and unvarying in transit for indefinite periods.

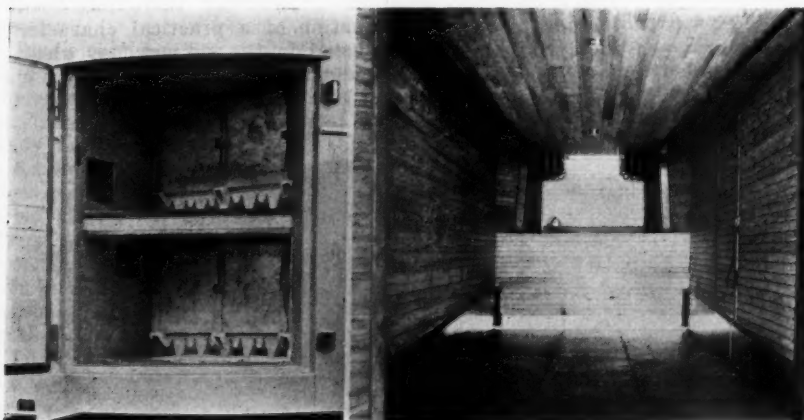
With the Mack company's development of the Statotherm system of truck body refrigeration control, this barrier



To conserve load space, the Statotherm in this tractor-trailer is placed on the round steamer front of the body.



Phantom view of a Statotherm-equipped Mack refrigerator truck suggesting how intermittent air circulation maintains close temperature control.



Left, gas-tight ice bunkers to prevent gas from reaching food contents. Right, interior view showing cold air ducts on both sides of ceiling and warmed air ducts at bottom of sides.

to the profitable expansion of perishable food trucking would seem to have been lifted.

Designed especially for motor truck body installation, the Statotherm provides exact and positive temperature control throughout any length of haul. It is instantly adjustable to any required temperature and holds that temperature throughout the entire load. Maintaining a uniform temperature throughout the entire load, the Statotherm is adaptable to, and economical with, any type of refrigerant.

How the Statotherm Works

THE Statotherm maintains this fixed and uniform temperature throughout load by intermittent circulation and constant agitation of the air within the body. It comprises three principal parts; the thermostat, the controller, and the blower system installed in an insulated body in connection with a cooling unit. Its name, combining the Latin *Status* (fixed) with the Greek *therme* (heat), exactly describes its function. It consumes a small amount of electrical power drawn from the truck battery.

In the usual refrigerator installation the blower draws the air by counter-flow from the cooling plate near the bottom of the body and blows it through graduated air ducts at the top, so that it is evenly distributed through the load. Other ducts near the bottom of the body connect it with the cooling plate duct so that through the suction of the blower the air is recirculated.

To interrupt this circulation when sufficient cooling has been effected, the circuit to the fan motor is controlled by a relay switch which in turn is governed by the thermostat. This thermostat is really the heart of the Statotherm, comprising a coil of bi-metallic strip acting on a balanced armature bar which, as it swings in response to minute variations in temperature, makes and breaks opposed contacts.

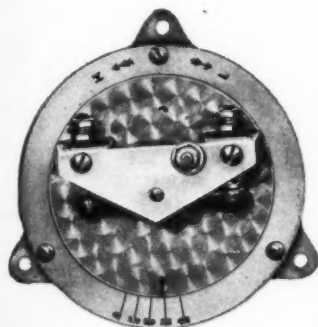
Mounted on an adjustable and calibrated head, the contacts may be turned



Mack Statotherm Equipped Model BX Tractor-Semi-Trailer Unit in the service of Overnight Motor Transportation Co.



INSTANTLY ADJUSTABLE TO ANY REQUIRED FOOD TEMPERATURE



Merely turning the adjustable head of the Statotherm thermostat sets it to maintain any required temperature, such as 29° for oysters; 38° for potatoes; 0° for quick-frozen foods; 32° for citrus fruits or fresh fish, etc.

In one simple adjustment, the Mack Statotherm can instantly be set to maintain a load within 1° F. of the exact temperature required for any kind of food to be carried. Control within such narrow limits and uniform throughout the load space keeps the whole load in prime condition. Avoidance of useless and undesirable overcooling saves refrigerant. Finally, the driver can quickly and accurately adjust the Statotherm to carry a return load at a different temperature.

The Statotherm thus opens up vast new markets for products not heretofore safely transportable. The most perishable food-stuffs may now be economically delivered in fresh condition to markets hundreds of miles from their origin, commanding prices which promise alluring profits.

Mack has developed special refrigerator bodies for Statotherm control. Statotherm units can also be installed in existing equipment at reasonable cost. An interesting, illustrated booklet mailed on request.

FEATURES OF STATOTHERM CONTROL

1. Positive and exact control of temperature within 1 deg. F.
2. Uniform temperature throughout load.
3. Adjustable instantly to any required temperature.
4. Adaptable to and economical of any type of refrigerant.
5. Simple and reliable — low operating cost.
6. Independent operation — standing or running — truck or trailer.
7. Control of dehydration.

MACK TRUCKS, INC. • 25 BROADWAY • NEW YORK CITY

Distribution and Warehousing, May, 1935

Page 17

to the proper position for any desired temperature. When so set, the slightest rise in temperature above that for which set will cause the armature to swing toward the warm side, closing the blower motor circuit. Instantly the air is drawn from all parts of the body, passed under the cooling plate and distributed through the body. This quickly lowers the temperature of all parts of the load space evenly.

When sufficient cooling has been effected, the thermostat responds by swinging the armature bar the other way, closing the opposite or cold relay circuit. This actuates an opposed relay which break the thermostat cold circuit, reestablishes the warm circuit, and breaks the blower motor circuit.

The blower then stops and, because the air-ducting is counterflow, all circulation under the cooling plate ceases

instantly. As the temperature consequently rises slightly and gradually thereafter, the cycle is repeated; and so, by intermittent operation in the blower, maintains the temperature in the body uniformly within 1 degree of the setting of the thermostat.

Owing to the fact that these small fluctuations occur with comparative rapidity, the variations in the temperature of the load itself are much less, depending of course upon the nature of the load. For food products, the variation will be within $\frac{1}{4}$ degree.

In very large and elongated load spaces, a second or agitating blower, operating continuously and not ducted to the cooling plate, may be used further to assist in preventing stratification of the air.

So carefully has the thermostat head been insulated that there is no frosting

on any part of it, and so weak is the relay current passing through its contacts that practically no maintenance is required.

Double ducting, whereby the air which passes under the cooling plate is circulated in a closed circuit, sealed off from the body air, the latter being blown through large connecting ducts, may be employed to avoid the dehydrating effect of passing the body air under the cooling plate direct.

Within their limitations, water ice, salt and ice, mechanical refrigeration or solid CO² may be used as the refrigerant. With the latter, where required, provision is made hermetically to seal and separately vent the ice chamber to avoid carbon-dioxide fumes reaching the load. The same installation may be adapted to use a choice of refrigerants where desired.

PACKAGES FOR COMMODITIES WHICH ARE TRANSPORTED UNDER REFRIGERATION

Commodity	Package	Weight	Commodity	Package	Weight
Apples	Standard Barrel (a) Bushel Basket (b) Standard Box 12 $\frac{1}{4}$ x12x19 $\frac{1}{2}$	155 47 50	Lettuce	Hampers (d)	
Apricots	Bushel Basket (b) Crate 5x16 $\frac{1}{2}$ x17 $\frac{1}{2}$ Boxes 3, 4 $\frac{1}{2}$ or 5x12x20 5 $\frac{1}{2}$ x16 $\frac{1}{2}$ x20	51	Melons, casaba	Crates 7 $\frac{1}{4}$ x17x23 $\frac{1}{2}$ 8 $\frac{3}{4}$ x17x23 $\frac{1}{2}$ 8 x17x23 $\frac{1}{2}$	
Beans (Green)	Hampers (c) and (d)		Melons, honey dew	Crates 12 $\frac{3}{4}$ x12 $\frac{3}{4}$ x23 $\frac{1}{2}$ 8 x 8 $\frac{3}{4}$ x9 7 $\frac{1}{4}$ x17 x23 $\frac{1}{2}$	
Beets	Hampers (d)		Onions	Crates 9 $\frac{1}{2}$ or 10 $\frac{1}{2}$ x11x19 $\frac{1}{2}$	
Blackberries	see Strawberries		Oranges	Boxes 12 $\frac{3}{4}$ x14x26 12x14 $\frac{1}{4}$ x26 12x13 x27 11x14 x27 12x12 x28	
Butter	Tubs Bottom Top Height 13 $\frac{1}{4}$ 15 $\frac{1}{4}$ 15 10 9/16 13 12 $\frac{1}{4}$ 9 7/16 12 10 6 $\frac{1}{4}$ 9 8 $\frac{1}{2}$	64 33 20 10	Peaches	Boxes 4 $\frac{1}{2}$, 5, 5 $\frac{1}{2}$ x12x20 Bushel Baskets (b)	51
Cabbage	Crates 20x20x28		Pears	Standard Barrel (a) Bushel Basket (b) Boxes 5, 9, 9 $\frac{1}{2}$, 11x12x20	187 56
Cantaloupes	Hampers (d) Crates 4 $\frac{1}{2}$ x12 $\frac{3}{4}$ x23 $\frac{1}{2}$ 5 $\frac{1}{2}$ x15 $\frac{1}{4}$ x24 12 $\frac{3}{4}$ x12 $\frac{3}{4}$ x24		Pineapple	Crates 11x13x36	
Carrots	Hampers (d)		Plums	Bushel Basket (b) 4 Basket Crates 4, 5x16 $\frac{1}{2}$ x17 $\frac{1}{2}$ In boxes 5 $\frac{1}{4}$ x16 $\frac{1}{2}$ x18 3, 5x12x19 $\frac{1}{2}$	60
Cherries	Pint cups in crates 7 $\frac{1}{4}$ x14 $\frac{1}{2}$ x19 $\frac{1}{2}$ 24 Pint boxes in crates 6 $\frac{1}{4}$ x14 $\frac{1}{2}$ x19 $\frac{1}{2}$ 16 Basket—2 deck crates 7 $\frac{1}{4}$ x10 $\frac{1}{2}$ x22 Quart cups in crates 7 $\frac{1}{4}$ x15 $\frac{1}{2}$ x22 16 Quart boxes in crates 8 $\frac{3}{4}$ x10 $\frac{1}{2}$ x23 24 Quart boxes in crates 8 $\frac{3}{4}$ x15 $\frac{1}{2}$ x22 24 Quart boxes in crates 11 $\frac{1}{4}$ x11 $\frac{1}{4}$ x24 16 Quart handle baskets 7 $\frac{1}{2}$ x9x19 $\frac{1}{2}$		Potatoes	Standard Barrel (a) Bags	150
Cranberries	Barrel, 16 $\frac{1}{4}$ heads 28 $\frac{1}{2}$ staves, bilge Circle 58 $\frac{1}{2}$, diameter 18 $\frac{1}{2}$	120	Potatoes, sweet	Standard Barrel (a) Bushel Baskets (b)	184 52
Currants	16 Quart boxes, crates 8 $\frac{3}{4}$ x10 $\frac{1}{2}$ x22 $\frac{1}{2}$ 24 Quart boxes, crates 8 $\frac{1}{2}$ x15 $\frac{1}{2}$ x22 $\frac{1}{2}$		Radishes	Standard Barrel (a)	158
Gooseberries	Same as currants		Raspberries	See Strawberries	
Grapefruit	Boxes 13x13x27 12x12x26 12 $\frac{1}{2}$ x12 $\frac{1}{2}$ x28		Spinach	Hampers (d) Standard barrel (a)	
Grapes	Drums 14-16 $\frac{1}{2}$ Diameter. 17 High Baskets, Top 6 $\frac{1}{2}$ x14 $\frac{1}{2}$ Bottom 5x12 $\frac{1}{4}$ Height 5 $\frac{1}{2}$	50 7	Strawberries	In cups in crates 7 $\frac{1}{4}$ x14 $\frac{1}{2}$ x19 $\frac{1}{2}$ 16 Quart boxes, crates 7 $\frac{1}{4}$ x9 $\frac{1}{2}$ x22 16 Quart boxes, crates 8 $\frac{3}{4}$ x10 $\frac{1}{2}$ x22 $\frac{1}{2}$ 24 Quart boxes, crates 8 $\frac{3}{4}$ x15 $\frac{1}{2}$ x22 $\frac{1}{2}$ 24 Quart boxes, crates 12x13x24	
Lemons	Boxes 11 $\frac{1}{4}$ x14x27 12x13 $\frac{1}{2}$ x27 12x14 $\frac{1}{2}$ x27 10 $\frac{1}{4}$ x14x27 10 $\frac{1}{4}$ x13x27 10x13 $\frac{1}{2}$ x27 12 $\frac{1}{2}$ x12 $\frac{1}{2}$ x28		Tomatoes	Bushel baskets (b) Crates 10 $\frac{1}{2}$ x11x23 4 $\frac{1}{2}$ x12x20 10 $\frac{1}{4}$ x12 $\frac{1}{2}$ x19 $\frac{1}{2}$ Top 13 $\frac{1}{2}$ x22, Depth 5 Bottom 11 $\frac{1}{4}$ x22	56
			Eggs	Shell cases 30 dozen 12 $\frac{1}{4}$ x12 $\frac{1}{4}$ x26	

NOTES:

Green corn, lettuce, carrots, spinach, cabbage and cauliflower are shipped in slack barrels of dimensions given under (a), also in a barrel of larger size having heads 19 $\frac{1}{4}$ inches in diameter and staves 30 inches long. All dimensions in table in inches and weights in pounds.

(a) Standard barrel heads 17 $\frac{1}{4}$ inches. Staves 28 $\frac{1}{2}$. Circumference at bilge 64 inches. Capacity 7056 cubic inches.

(b) Bushel Basket Bottom 14 $\frac{1}{2}$. Top 18. Height 12. Diameter of lid 18 $\frac{1}{2}$.

(c) Hamper Bottom diameter 9. Top diameter 13. Height 13 $\frac{1}{2}$.

(d) Hamper Bottom diameter 10 $\frac{1}{2}$. Top diameter 15 $\frac{1}{2}$. Height 18 $\frac{1}{2}$.

Data from A. S. R. E. data book, 1934-1936.

FRESH

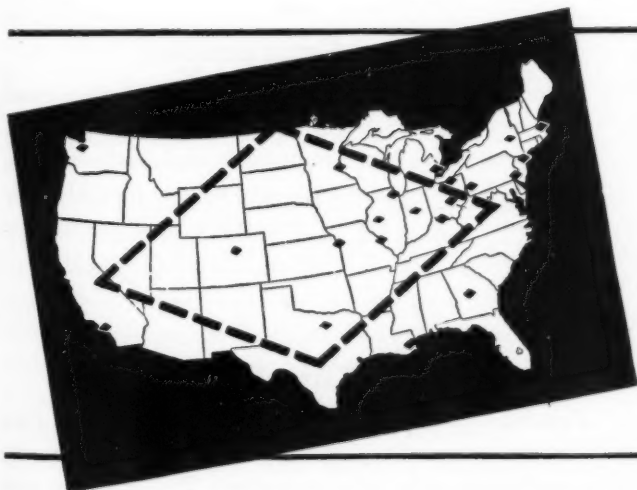
and Full Powered

A network of 24 manufacturing plants produces Red Diamond dry ice in as many locations throughout the country. This enables us to deliver promptly to shippers in practically any section. Whether the shipment is ice cream on a local truck route or fish from the gulf to the Great Lakes, it starts its journey with ice that is fresh—at the peak of its refrigerating value.



NOTICE TO SHIPPERS

If you are not familiar with the economies possible through the use of this modern refrigerant—the increasing of pay loads and operating distances, the elimination of re-icing on long hauls, and the better preservation of perishable products—just drop a card to "Liquid" engineers. Without obligation on your part, they will gladly give you the latest facts on your particular refrigerating problems, or mail us a postcard for booklet "Red Diamond Dry Ice, The Commercial Refrigerant."



THE *Liquid* CARBONIC CORPORATION

3100 SOUTH KEDZIE AVENUE, CHICAGO, ILLINOIS

Branches in 37 Principal Cities of the United States and Canada
London, England Havana, Cuba

"ENGINEERED TRANSPORTATION"
—Reg. U. S. Pat. Off.

Refrigerator Trailers by **FRUEHAUF**

★
NOW AT ONE SOURCE YOU
CAN GET COMPLETE INFORMATION
ON REFRIGERATED HAULAGE . . .

★
Your Problem

Before you spend any money, you want to know definitely what you should buy—and why. Call on Fruehauf. A transportation expert will analyze your problem. He'll tell you whether or not Trailers are the answer. He'll tell you about haulage costs—what you can expect to save—the size and type of unit best suited to your needs.

This service—the counsel and recommendations of competent engineers—costs you nothing. It is a part of our program to simplify your purchasing.



★
Your Equipment

If you decide on Fruehauf equipment, you need buy nothing "outside." The chassis, the body, whatever type of refrigeration is required—wet ice, dry ice, brine or mechanical—all are furnished by Fruehauf. You get a complete unit, ready for the road.

★
Use This Service

Fruehauf engineers know transportation and they know refrigeration. Whether you want a recommendation only or a complete Trailer—you can depend on Fruehauf to work out your problem to your best advantage.



★ A Suggestion To Lower Your Costs!

More large fleet owners have standardized on Fruehauf Trailers than on any other type of Trailer equipment. Here's why: From a service standpoint alone, your costs go down. In the first place, service expense on Fruehaufs is negligible. They're built to last. But, in addition, changes in Fruehauf construction are few. And no change is made without thought first being given the Fruehaufs then in use. A majority of the parts in today's Fruehaufs are still interchangeable with those of years ago. Further, Fruehauf offers you national service facilities. Wherever you travel, expert labor and a complete stock of parts are available nearby.

It pays to standardize on Fruehaufs.

★ NEW FOLDER Now READY

A complete, illustrated folder—just off the press—describes Fruehauf Refrigerated bodies and a newly developed brine-cooled refrigeration system. This system has been tested

and proved by one of the largest packers in the country. Its outstanding features are economy and simplicity.

For those who cannot afford more costly equipment, this unit will be more than satisfactory. It has been especially designed for Fruehauf Refrigerated bodies—will maintain freezing temperatures in one of these bodies for several days. Write for your copy of this folder today. Sent without obligation.

★
Oldest and Largest Manufacturers of Trailers
FRUEHAUF TRAILER COMPANY
10936 Harper Avenue - - - Detroit, Michigan
Sales and Service in All Principal Cities

PETROGAS Refrigerates Body and Runs Truck Engine

McCord and Shell Oil development has many advantages from the economy standpoint

ABOUT a year ago the McCord Radiator & Manufacturing Co. announced completion of development work on a system which uses Petrogas, a hydrocarbon distillate similar to propane, both as a refrigerant and a fuel. McCord is exclusive licensee as the result of an agreement with the Shell Oil Co.

Petrogas has an extremely high octane rating and can be bought at approximately the same price as gasoline, on a performance basis.

As a result of this system the refrigeration is obtained at no cost. As propane weighs only 4.24 lb. per gallon as compared to 6.6 for gasoline, the total saving in weight about offsets that of cylinders, valves, convactor and other parts.

And if advantage is taken of the high octane rating of this fuel by increasing the compression ratio of the engine, an increase in efficiency of approximately 25 per cent can be effected.

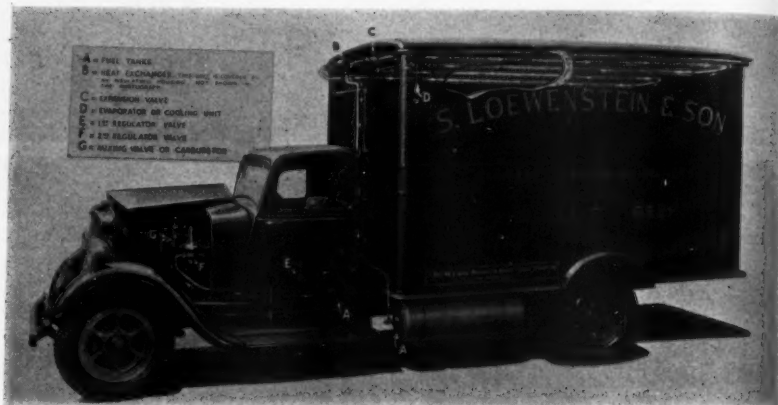
In the McCord system, two cylinders (shown at A in the accompanying illustration), each holding 100 lb., or about 23 gal., of liquid Petrogas (or propane) are carried under the truck body. The liquid fuel from these cylinders is led under its own vapor pressure, which at 80 deg. Fahrenheit is approximately 135 lb. per square inch, to two expansion valves (shown at C) adjusted to open at any low-side pressures under 7 lb. and 5 lb. respectively.

These expansion valves open into an evaporator or cooling unit (D) constructed of finned copper tubing, and located within the refrigerating compartment. Latent heat of vaporization is absorbed from the contents of the truck body, producing refrigeration when the liquid fuel within the evaporator is expanded to a dry gas.

This dry gas is then led outside the refrigerating compartment, through a heat exchanger (B), through two pressure-regulating valves to the mixing valve or carburetor (G) and thence to the engine manifold.

These parts, then, make up the system in its simplest form; fuel cylinders, expansion valves, evaporator, heat exchanger, first and second regulating valves (E) and (F) respectively, and, finally, the carburetor.

For a clear understanding of the Mc-



Diagrammatic view showing how McCord system operates in a dual capacity.

Cord system and its operation, let us follow the propane fuel in its passage from fuel tanks to truck engine. As before stated, it is forced as a liquid by way of the heat exchanger to the expansion valve, by its own vapor pressure. Were it not for the presence of minute quantities of water held in suspension in the fuel, only one expansion valve would be necessary; but this moisture, freezing in the expansion valve as it does, makes necessary the use of two such valves in parallel. They are so adjusted that No. 1, let us say, opens when the evaporator pressure drops below 7 lb.; while No. 2 opens only when the pressure is less than 5 lb.

No. 1 expansion valve, consequently, is functioning almost constantly during the operation of the engine; but, given a sufficient quantity of moisture in the propane fuel, may ultimately freeze at the expansion valve orifice. When this occurs, the evaporator pressure drops, as valve No. 1 is no longer supplying fuel. When this pressure becomes less than 5 lb. per square inch, valve No. 2 begins functioning, and continues to supply fuel until No. 1 resumes work. The moisture which had frozen at the orifice of No. 1 is by now melted, and is blown, all or in part, into the evaporator. For a few moments fuel is being drawn through both valves, building up the pressure within the evaporator until it is greater than 5 lb., at which time No. 2 closes, and No. 1 again supplies all of the fuel.

The evaporator, or cooling unit (C), may take the form of the relatively large natural convection unit, made of spiral finned copper tubing; or the much more compact forced convection unit, used in conjunction with a motor-driven fan. The former will range in surface area from 100 to 150 sq. ft., and in weight from 50 to 75 lb., and in typical installations now in service is made

of continuous $\frac{3}{8}$ -in. copper tubing with four $\frac{3}{8}$ -in. fins per inch. The second, or forced convactor type, is lighter, more compact, easier to install, and assures a more satisfactory circulation and distribution of chilled air than does the first type. The only disadvantage which may be urged against it is that current is consumed by its motor.

The fuel having, in its passage through the evaporator or cooling unit, performed its function as a refrigerant, it now passes from the insulated body as a cold dry gas, and into the heat exchanger (B) covered by an insulating housing (not shown in the illustration); there it parallels the in-going and relatively warm liquid propane and removes its sensible atmospheric heat. Issuing therefrom, it passes to the first diaphragm regulating valve (E), where the pressure is reduced to 4 oz. After passing through a second regulating valve (F), which reduces the pressure to atmospheric or zero gauge pressure, it is led to the carburetor or mixing valve and thence to the inlet manifold.

The mixing or proportioning valve replaces the carburetor on installations where only propane is used as a fuel. Inasmuch as propane has a final boiling point of 40 degrees below zero, Fahrenheit, there is an ample temperature gradient between the temperature of vaporization of the fuel and the temperature of the contents of the truck to permit of evaporation of the fuel by heat removal from the truck content.

The gas becomes superheated in its passage through the length of the evaporator and through the liquid-gas heat exchanger; therefore only dry gas can arrive at the mixing valve, which becomes, then, a simple proportioner of gas and air at an approximate ratio of 1 to 20.

The only sort of temperature control needed with this system is one which

Use Solid Carbon Dioxide For Truck Refrigeration

AN insulated trailer weighs but little more than a regular closed trailer.

The additional traffic you can attract by offering refrigerated service pays many times over, for the slight additional cost of insulation and for the solid carbon dioxide refrigerant it uses.

Let us tell you how simple and how inexpensive it is to equip your trucks to cash in on this fast growing service.

International Carbonic Inc.

New York, N. Y.

Wilmington, Del.

will prevent too low temperatures being attained.

This result may be achieved in three ways: first, by opening a small ventilating port in the refrigerator body by means of a thermostatic control, and in this manner admitting warm outside

air; second, by thermostatically by-passing the propane so that expansion takes place in a heat exchanger outside the refrigerator body; or third, by means of a special valve in the fuel cylinder, to thermostatically switch from liquid fuel to gaseous fuel.

In the third case the phenomenon of refrigeration will occur inside the cylinder and not in the evaporator.

The first method is favored by the McCord company because of its simplicity.

Davidson Cuts Trailer Weight by Using Aluminum



Mixed loads can be carried in this dry ice body.

THE main factor in efficient shipping of perishables is speed of delivery. The lighter the truck body, the greater the chance of attaining speed. But the warehouseman wishes bodies of sufficient size for large hauls as well as light weight.

This difficult combination is found in the extremely attractive trucks of Davidson Transfer & Storage Co., Baltimore. Together with Fitz Gibbon &

Crisp, Inc., the builders, the storage firm has designed a refrigerated truck of all aluminum framework. The metal itself offers lightness, strength and beauty. The striking exterior of aluminum paneling, moreover, serves to deflect heat.

These trucks are equipped with the Icefin conduction refrigeration system with which solid carbon dioxide, or dry-ice, is used.

The roominess is obtained by eco-

nomical arrangement within the body. There are no fins or bunkers to occupy valuable space. The dry-ice is stored in roof hatches which can be reached from the outside and filled when the truck is already loaded. Overhead plates absorb the heat from the inside of the body and give it to the dry-ice on the roof. By this means any desired temperature can be maintained.

With solid loads, floor racks enable the air to be circulated for cooling. But these racks are tightly packed away in side water-tight compartments when not needed.

Another special adaptation is the movable insulated partition. When necessary, this isolates part of the truck body, thus permitting non- or partially-refrigerated goods to be shipped at the same time as the fully-refrigerated commodities.

These movable parts facilitate the cleaning of the body, as does the aluminum welded floor which can be flushed out after every trip.

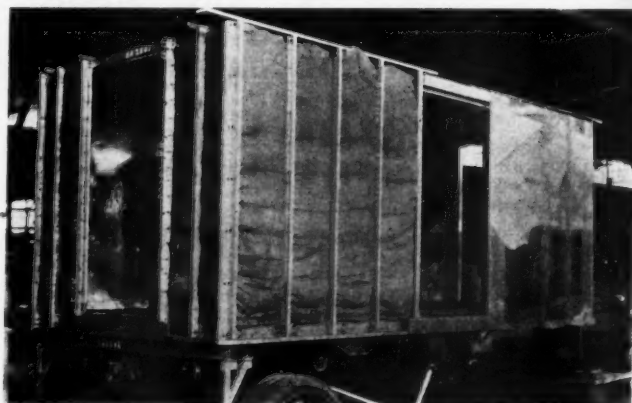
Highway Trailer Constructs First All-Aluminum Trailer

THE illustration to the right shows one stage of construction, from the ground up, of the first all-aluminum refrigerated trailer and body ever built. This job was done for the Borden Milk Co., and all work was completed in the factory of the Highway Trailer Co., Edgerton, Wis.

This trailer body has doors not only at the sides and rear but at the front as well; thus when it is detached from the tractor, removal of milk may be made with the greatest speed.

Although the chassis frame construction is made up of a large number of cross-members, the use of aluminum decreased weight to such an extent that the complete frame can be carried by three men.

The same proportionate weight reduction is attained with the aluminum paneling inside and outside, between which is placed the insulating material (shown in the accompanying view).



Left, a Highway trailer used by Merchants Despatch, New York, said to be operating country's largest fleet of refrigerated trailers.

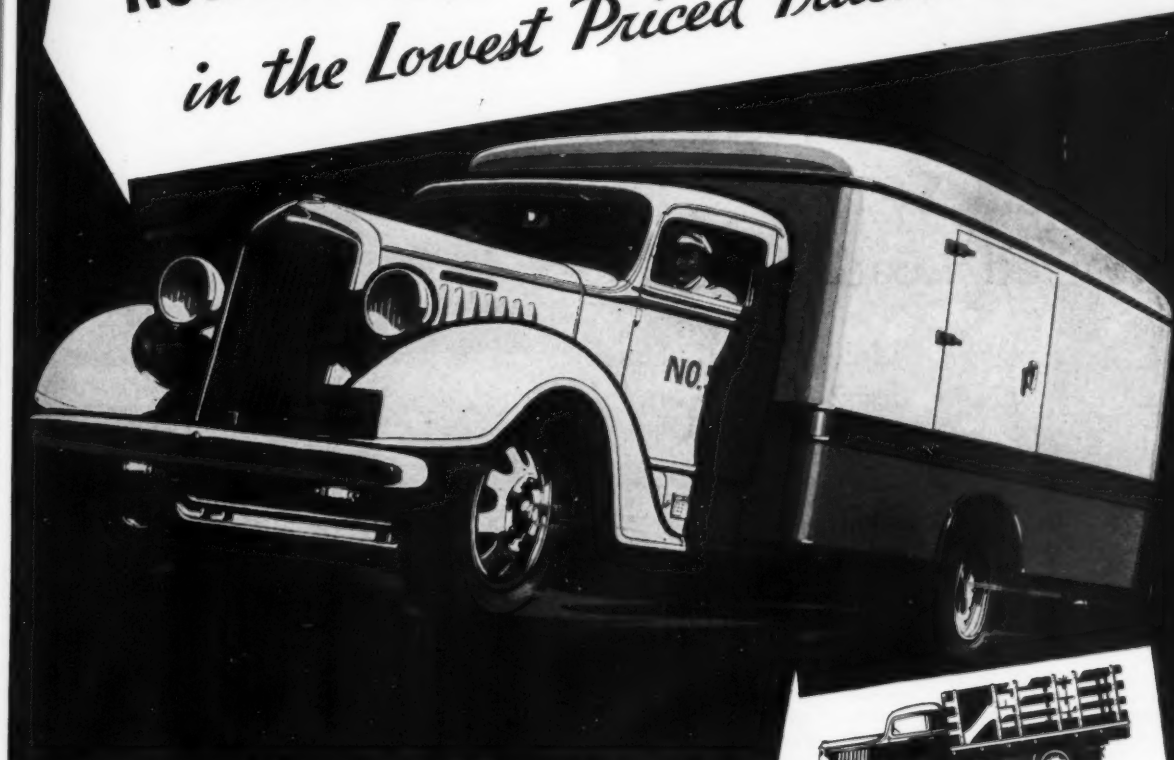
Refrigeration Facts

Cold storage holdings as of March 1, 1935, include the following figures:

Apples, 339,000 barrels, 7,935,000 boxes and 5,000,000 baskets; frozen and preserved fruits, etc., 50,581,000 pounds; poultry, 106,202,000 pounds; American cheese, 60,939,000 pounds; meats, 875,599,000 pounds; creamery butter, 7,981,000 pounds.

Five-year average, March 1, 28,176,000 pounds.

NOW REO GUARANTEED PERFORMANCE in the *Lowest Priced Truck Field!*



BEFORE you again invest your money in a low-priced truck, see the splendid new Reo 1 1/2 Ton Speedwagon, at the sensational price of \$535, and ask yourself this question:

"Where else can I buy a truck comparable to this new Reo, in power, rugged strength, performance, and speed—*plus the definite assurance of guaranteed performance!*"

The answer is: "Nowhere in the industry!" For, Reo, alone of all truck manufacturers, gives you this definite warranty: *each and every Reo Speedwagon carries an Ability Rating Plate which tells you exactly what performance may be expected—in high gear, on steep hills and over level roads. All trucks operated under this plan are fully guaranteed!*

Backing up this warranty, of course, is traditional Reo truck

quality and the modern engineering you would expect from Reo's 30 years in the truck business.

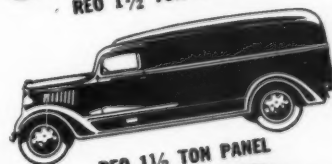
Go over the new Reo Speedwagon's specifications, point by point. You will find a husky 6-cylinder Silver Crown Truck Engine—Reo-engineered and built; hydraulic brakes, pioneered by Reo for truck use; maximum loading space; balanced load distribution; full floating axle; streamline appearance and comfortable cabs for drivers.

This handsome new Reo Speedwagon will do more than reflect credit on your business—it will credit your good sense in obtaining substantial savings on haulage, in freedom from repair and above all in long life and economy. Call your Reo dealer today and have him explain how you benefit from Reo guaranteed performance.

STANDARD BODY TYPES FOR NEARLY EVERY HAULING NEED



REO 1 1/2 TON STAKE



REO 1 1/2 TON PANEL

\$535*

1 1/2 TON SPEEDWAGON CHASSIS

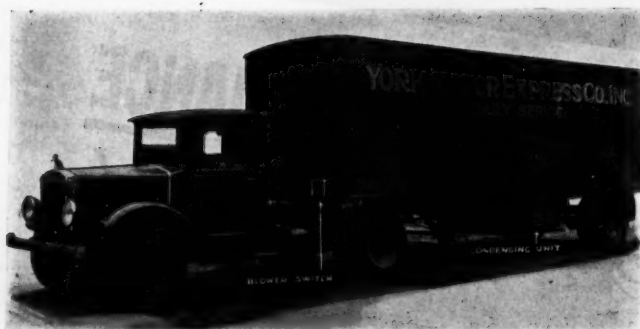
Reo Speedwagons and Trucks range from 3/4 to 4-6 tons including Tractor-Trailers and Buses. Prices from \$495 up, chassis f. o. b. Lansing, plus tax. Special equipment extra.



Prices subject to change without notice.

*Chassis f. o. b. Lansing, tax and dual wheels extra.

REO MOTOR CAR
COMPANY
LANSING, MICH.



A typical Kold-Hold installation

Kold-Hold System for Mixed Loads

Units charged at night for 24-hour work

AMONG the several mechanical refrigeration systems developed for truck application is the KOLD-HOLD. Several hundred installations have been made since R. E. Olds, of automotive fame, took it over approximately two years ago, and every KOLD-HOLD-equipped job is declared to be giving thorough satisfaction. This is attributed in large measure not only to the excellence of the equipment itself but to a fixed policy of the company to engineer each individual job to the exact service conditions under which it will be used, as well as taking into consideration the type of body in which it is to be installed, its size, construction, insulation and all the elements which in any way will influence performance.

Before describing the apparent advantages and claims for this system as made by the manufacturer, it would perhaps be best to convey to the reader an idea of what the KOLD-HOLD system consists and how it works. This company features two applications—the standard system, and the forced convection system, and we shall attempt to describe them in the order mentioned.

Standard System

This application of KOLD-HOLD is designed to provide refrigeration at a given temperature either in the low range (approximately zero) or in the high range (35 deg. to 60 deg.) and is employed only when the truck is to be used solely for the purpose of transporting the product for which the refrigeration equipment was selected—such as ice cream on the one hand, and butter, cheese, milk, or meat, etc., on the other.

Mechanically, the system consists of one, two, three or more KOLD-HOLD cooling units either suspended from the ceiling or mounted vertically in the truck

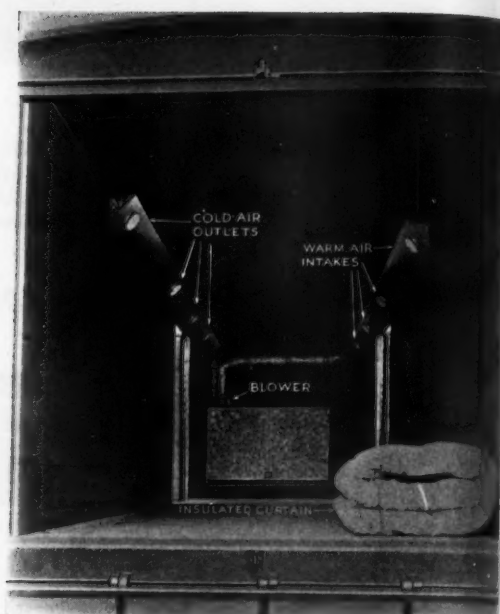
body, which are employed as the low side of the refrigeration system. Each unit consists of a sturdy container made of rust-resistant steel with a finned, sealers-steel tube, flat-grid type evaporator submerged in a patented true Cryohydrate which freezes at a predetermined temperature.

The units are charged or frozen usually at night while the truck is idle, either by means of a compressor on the truck, hook-up with a compressor in the garage, or, as is the case in many instances, hook-up with the central plant ammonia system.

The Cryohydrate in the KOLD-HOLD units freezes to a flint-like hardness; thus, just as the storage battery of an automobile stores electricity, the KOLD-HOLD units store a sufficient amount of refrigeration during the night to provide the temperature desired during the 12 to 24 hours that the truck may be in operation the following day. When the compressor is mounted on the truck, the latter's touring range is practically unlimited, as the compressor can be plugged in wherever a power circuit is available. If continuous, twenty-four hour service is desired it may be had with the KOLD-HOLD system by employing a gas-engine driven compressor on the truck.

Except in the case of a gas-engine driven compressor there are no moving parts while the truck is in operation—nothing to go wrong; and regardless of the truck being stalled, the payload is fully protected from 12 to 24 hours according to the period of holdover decided on when the equipment is installed.

The KOLD-HOLD units are permanently installed and hence there is no labor loading refrigerant or time lost waiting for refrigerant. The payload



Illustrating forced convection installation for products requiring 30 to 60 degree temperatures.

may be left in the truck overnight or until cold—a factor which saves a great deal of labor. And according to the manufacturers, KOLD-HOLD is clean and dry—no moisture to collect dirt or plug drains. It causes no deterioration of the body—gives off no odor. Temperatures provided, whether zero or in the 35 to 60 degree range, are exceptionally uniform; and the efficiency of the KOLD-HOLD units, because of the true Cryohydrate used in them, does not diminish with use.

As an example of the economy of the system, the manufacturers submit that the total cost of refrigerating a large-size ice cream body, at approximately zero, is less than 50 cents per day as established by hundreds of users. This figure includes power consumption; depreciation, figured at 20 per cent; maintenance; and service costs; and is based on the use of electric-driven condensing units. Where hook-up with the central ammonia system is employed, it is said that costs are usually lower.

Forced Convection System

This application is said to provide ideal refrigeration for large trailers or semi-trailers required to handle various products such as meat, butter, milk, beer, vegetables, frozen eggs, flowers, candies, etc., or mixed loads of products requiring refrigeration and those which do not.

As may be partially noted from the accompanying diagram-illustration, the KOLD-HOLD forced convection system consists of an insulated housing containing a suitable number of KOLD-HOLD cooling units, usually installed in the front end of the body, connected to ceiling ducts through which the air of the body is circulated by means of a ther-

Mechanical Details

... are Only PART of the Story



This new 1½ to 2-ton Model C-35 with refrigerated semi-trailer is one of eight International Trucks that haul for Carsten Packing Company, Tacoma, Wash.

MANY claims are made, by many makers, as to mechanical features in trucks, but how much do these claims help you in getting at fundamental truck values? We have all the engineering data for any truck buyer who is interested in technical information. But there are better ways to judge a truck's value to you.

International Truck performance is the best evidence you can get of sound truck investment. It is obvious that the results of International engineering experience gained in 30 years of truck building would be embodied in the perfected Internationals of today. Moreover—it is plain good sense for a truck buyer to ally himself with the largest Company-owned truck-service organization in the world. *These are fundamentals you can bank on. They don't change, except for the better.*

International Trucks range from half-ton to powerful six wheelers. Ask for a demonstration.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)

INTERNATIONAL TRUCKS

mostatically-controlled blower to furnish refrigeration as and when desired.

As is the case in the standard system, the Cryohydrate is frozen by means of either electric or engine-driven compressor mounted on the truck, or by hook-up with central plant or compressor located in garage—choice of compressor hook-up depending on individual plant and service conditions.

The principal advantages of this system as listed by the manufacturers are as follows:

The system may be very quickly adjusted to provide any temperature desired within the range of 35 to 60 degrees. Very close temperature control is automatically maintained by means of the thermostatically-controlled blower, which insures delivery of products carried at the same temperature as when loaded.

Exceptionally uniform distribution of refrigeration is provided to all parts of the body, or any part in which refrigeration is desired. The variation is

claimed to be less than 5 degrees, and the manufacturers point out that this eliminates the possibility of freezing any products which may be located near the source of refrigeration, while other products, further removed, may suffer from lack of refrigeration, as so often occurs with some methods of refrigeration.

Any portion or entire body may be refrigerated, permitting the hauling of mixed loads. This is accomplished by means of a heavily-insulated curtain and damper controls in the ceiling ducts.

Due to the fact that the blower need not be operated when doors are open in making deliveries, or when non-refrigerated loads are carried, refrigeration is conserved for actual service, no waste whatsoever.

With no refrigerant or containers to handle, the KOLD-HOLD cooling units are permanently installed and are recharged by simply plugging compressor motor connection into power line—or hook-up with plant ammonia system

when truck is idle; or, in case of continuous 24-hour operation, by engine-driven compressor. There is no labor expense, inconvenience, or loss of time loading or unloading undelivered portion of load at night, and the hauling range of a truck so equipped is practically unlimited.

The KOLD-HOLD Manufacturing Co. states that its system can be successfully installed in any body, used or new, having adequate insulation and offers a free engineering analysis and recommendation for any specific body a prospective user might contemplate converting to the use of KOLD-HOLD. All that is necessary, to obtain this is to write the company requesting standard data sheet; fill out the information asked for, and return. Installations made in accordance with these recommendations are guaranteed to give satisfactory performance.

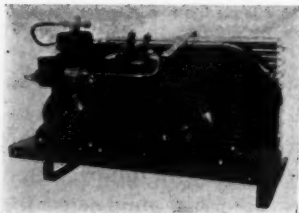
Complete information on the KOLD-HOLD system may be had without obligation by addressing the KOLD-HOLD Manufacturing Co., Lansing, Mich.

Refrigeration Products in Brief Review

The following brief descriptions of body refrigerating equipment gives the highlights of the various lines produced by the companies named.

Copeland

COPELAND commercial condensing units are adaptable to any type of service requiring automatic refrigeration. Accompanying illustration shows a unit furnished for the truck field. This comes in two sizes, the SE 197, a 1 h.p., 352-lb. net weight model; and the SE 220, 1½ h.p., 375-lb. net weight model. Both have a height of 24 inches, a length of 39", and widths respectively



of 23" and 24 inches. The truck units differ from the standard line primarily in that the bases are of lighter construction and with the base of strap steel to provide strength and mounting facilities. The saving of weight, for instance, on a truck 1½ h.p. air-cooled condensing unit as compared with the standard is 125 lbs., about 25 per cent.

In the opinion of the company, the most satisfactory power supply is a Whitaker-Upp constant voltage generator.

Curtis

A COMPLETE line of refrigeration units for trucks is manufactured by the Curtis Refrigerating Machine Co.

Highlights of Design and Use for Motor Truck Work

This line includes standard electric motor-driven units for use with hold-over equipment; gasoline engine-driven units for use with either fin coil or hold-over equipment; and units which can be equipped with the Century-Upp dual motor electric systems. All these types are built in a complete range of sizes.

Dole

THE Dole Refrigerating Machine Co., whose vacuum plates have been used quite extensively in packing companies' meat-cooling rooms and for cheese storage and window displays of perishable food products, has found that these plates also successfully replace coils and fins in truck refrigerated bodies.

They can be used in connection with any system of refrigeration. A feature is that they can be cooled at a central plant and then placed in an insulated truck on hangers provided for that purpose. To do this efficiently a hold-over solution must be used. But with this method the plates can be cooled at any central plant and used in the truck from 6 to 8 hours, providing a temperature sufficiently low to prevent spoilage.

By having a spare plate, plus cooling facilities at end of 150 to 200-mile runs, it would be possible to operate an efficient refrigerated truck in both directions with this system.

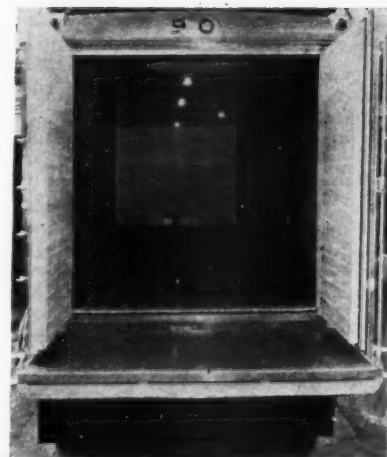
The principle of the system, which is relatively new, is the circulating of brine through pipes sealed in the plates.

It is said for the plates that their use will prevent discoloration of meats, eliminate waste in trimming, prevent slime and odors, maintain natural color and moisture, and reduce refrigeration costs.

Fitz Gibbon & Crisp

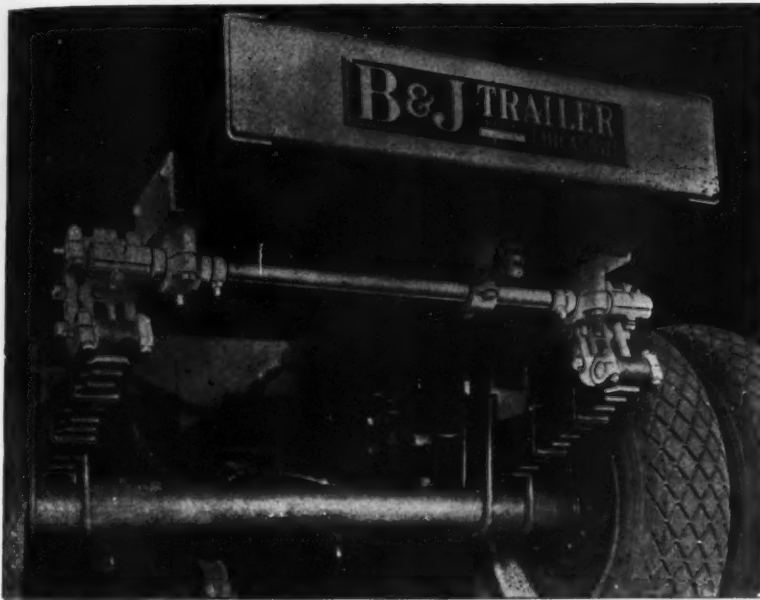
THREE types of refrigeration units have been developed by Fitz Gibbon & Crisp.

First is the Frigid-Gel plate, which is a storage proposition installed in the



ceiling of the body and operated by a compressor mounted in the skirt or by a
(Concluded on page 32)

★ B & J REFRIGERATED TRAILERS



as well as *ALL*
B & J TRAILERS
are now equipped
with

**GRAVITY
SPRING
SUSPENSION**

More and more warehousemen and motor freight operators are realizing the advantages of **GRAVITY SPRING SUSPENSION**—especially because they are hauling *other people's merchandise*.

B & J Trailers equipped with **GRAVITY SPRING SUSPENSION** eliminate many losses due to damaged loads. The coil spring in the big B & J **GRAVITY SPRING SUSPENSION** absorbs the jolting shock that ordinarily bounces the load all over the trailer. Over the roughest road the load is protected at all times. **IT STAYS ON THE FLOOR!**

Two-Fold Economy is possible only with B & J Trailers. In addition to saving on losses caused by damaged loads a very substantial gasoline saving is also effected. One operator reports a saving of nine gallons of gasoline per truck per day with a fleet of 19 B & J Trailers, running between Detroit and Chicago.

You owe it to yourself—to your business, to investigate this new B & J TRAILER and this **NEW REVOLUTIONARY TYPE OF SPRING SUSPENSION**.



This operator with 14 B & J TRAILERS running between New York and Chicago, in an unsolicited letter reports an extra mile from every gallon of gasoline since using B & J GRAVITY SPRING SUSPENSION TRAILERS.

B & J

TRAILER COMPANY

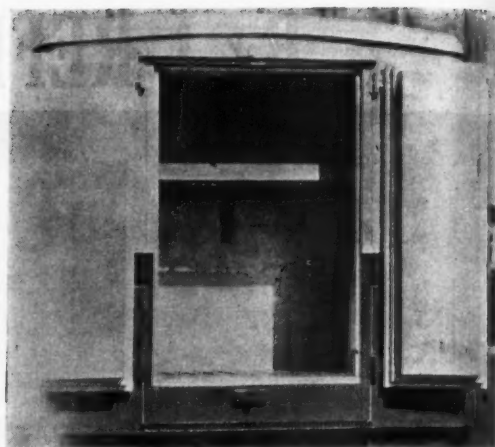
3913 SOUTH MICHIGAN AVENUE - CHICAGO - ILLINOIS

"Kold-Trol" Assures

Dry Ice Control

York product is designed
for all perishable foods

Right, method of mounting unit within compartment



HAND in hand with the amazingly rapid development of motor truck transportation, during the past decade, particularly in the distribution of food products, has come an increasing appreciation, on the part of both public and distributor, of the importance of refrigeration in the proper handling, transporting and preservation of perishable food and dairy products, such as milk, ice cream, butter, fruits, vegetables, and meats. Competition, and the public demand for absolute freshness in such products, have taught both distributors and producers that dependable and continuous refrigeration, from the point of origin to the point of final consumption, is today an absolute necessity.

With the advent of solid carbon dioxide, more commonly known as "dry ice," new possibilities were opened in its application to the refrigeration of products en route, such as ice cream, milk, meats, candies—in fact, any product whose quality or freshness may be easily affected by high temperatures.

One of the most practical systems thus far developed to utilize fully the advantages of solid carbon dioxide as applied to the refrigeration of food products in transit is that perfected by the York Ice Machinery Corp., designed especially for truck refrigeration.

Known as the "Kold-Trol" system, this consists of an endless tube, arranged in two interconnected coils, one above

the other, so that a volatile liquid, hermetically sealed within the tube, will flow by gravity from the higher coil, called the condenser, to the lower coil, termed the evaporator.

When the solid carbon dioxide is placed in close contact with the condenser the chilling action condenses the gas evolved from the volatile liquid, which is at a higher temperature than the condenser. As evaporation takes place, heat is absorbed by the evaporator, thus producing the refrigerating effect.

Automatic Control

An adjustable thermostatic valve in the gas line between the top of the evaporator and the condenser coil allows positive control of the refrigerating effect of the evaporator. When this valve closes, gas is trapped in the evaporator; and as this volume of gas increases, the entire charge of liquid is forced backward out of the evaporator and into the condenser. When refrigeration is again required to maintain temperature at a predetermined level, the valve opens automatically, releasing the gas to the condenser and permitting the liquid to flow into the evaporator. This action being entirely physical, the full refrigerating effect of the dry ice is utilized in the evaporator.

Five Ranges of Control

This simple unit has no moving parts to get out of order. The thermostatic valve may be adjusted to operate automatically at predetermined levels, in any one of five different ranges, closing or opening to maintain these temperatures. Temperature adjustments, each within a 50-degree range, may be made as follows:

—30 to 0°F. +5 to +35°F.
—15 to +15°F. +30 to +60°F.
 +50 to +80°F.

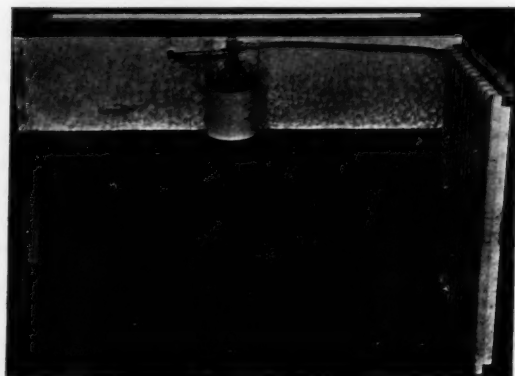
The thermostatic valve can be set so that the temperature will not go below or above the degrees desired, within the 50-degree range selected. These temperature ranges will vary with the type of commodity handled. In trucks especially designed for the transportation of ice cream, the temperature range is from 10° below to 15° above zero, Fahrenheit, for most satisfactory results; while ranges most practical for other commodities may be from 5° to 35° above zero and 30° to 60° above zero. The unit may be fitted with thermostatic valve to give the desired range of temperature. The entire unit requires only a simple initial adjustment of the valve.

Truck bodies equipped with York Kold-Trol units are suited to a wide range of capacities, required in the transportation, under ideal conditions of controlled refrigeration and temperature, of many different commodities of the "perishable" variety, from milk or ice cream to fruits, vegetables, bakery products, etc., where continuous refrigeration is essential to preserve quality and freshness.

The refrigerating unit is fitted compactly into the truck bodies so that every inch of space is fully utilized to provide a refrigerating chamber of maximum capacity. Weight and space occupied by the unit have been reduced to a minimum, permitting maximum space for pay loads, and practically eliminating repair and service expense.

An innovation in the design of these units eliminates the necessity for openings in the roof of the truck for charging the unit with the dry ice refrigerant. Such roof openings have in the past proved a source of much inconvenience and trouble. The dry ice may be charged either through a small door in the side of the truck, or from the interior of the truck body.

The cooling plate of the unit is placed against the back or side wall of the refrigerating compartment, and the dry ice compartment is located against the ceiling of the truck.



Left, types A and B of "Kold-Trol" unit used in truck refrigeration

COMMODITIES USUALLY TRANSPORTED UNDER REFRIGERATION AND THEIR WATER CONTENT, SPECIFIC HEAT AND CARRYING TEMPERATURE

Commodity (unfrozen)	H ₂ O		Carrying Temperature 0°F
	Content %	Specific Heat	
Asparagus	94.	...	33-34
Beans (green)	60.	0.91	33-34
Beets	89.	...	32-40
Broccoli	91.	0.93	32-34
Cabbage	91.	0.93	32-36
Cauliflower	92.	...	32-34
Celery	94.	0.95	32-34
Corn (green)	75.	...	36-38
Cucumbers	95.	...	36-40
Lettuce	94.	...	32-40
Onions	88.	0.91	32-36
Peas (green)	75.	...	32-36
Potatoes (Irish)	79.	...	35-40
Potatoes (sweet)	78.	...	50-55
Radish	91.	...	32-36
Squash	88.	...	33-36
Tomatoes	94.	0.95	35-40
Bacon	20.	0.50	30-35
Beef (fresh)	72.	0.77	32-40
Fish (fresh)	76.	0.82	30-35
Lamb	...	...	32-36
Mutton	67.	0.81	32-36
Pork (fresh)	46.	0.51	30-34
Poultry	60.	0.80	28-30
Oysters (in shell)	...	...	30-35
Veal	63.	0.70	35-40
Apples	84.	0.92	32-36
Apricots	85.	...	35-40
Bananas	75.	0.80	55
Blackberries	86.	...	36-40
Cantaloupes	81.	0.92	35-40
Cherries	84.	0.85	36-40
Cranberries	88.	0.91	33-36
Grapefruit	88.	0.92	32-36
Grapes	75.	0.92	32-36
Gooseberries	...	...	36-40
Lemons	89.	0.91	40-45
Oranges	87.	0.89	35-45
Peaches	89.	0.92	35-40
Pears	84.	0.90	32-34
Plums	78.	0.83	32-36
Raspberries	...	0.89	35-40
Strawberries	90.	0.92	35-40
Butter	10.	0.64	20-35
Cheese	35.	0.64	35-40
Eggs	73.	0.76	33-35
Milk (sweet)	87.	0.90	32-36
Milk (butter)	...	...	32-40
Fish	...	...	10-20
Eggs	...	...	10-15
Vegetables	...	...	5-10
Meats	...	...	10-20
Fruits in Syrup	...	...	10-20

From A.S.R.E. data book, 1934-1936.

Refrigeration Facts

Some idea of the opportunities opened up by the development of motor truck refrigeration is afforded by the fact that of the nation's \$22,000,000,000 food bill, 75 per cent, or \$16,500,000,000, is perishable.

The fish catch alone accounts for more than \$250,000,000 of the annual food bill. According to the Bureau of Fisheries figures for 1933, the total catch in the United States and Alaska amounted to 2,269,178,000 pounds, of which 80 per cent was made up of salmon, sardines, cod, haddock and sea herring. Salmon amounted to about one-fourth of the total, and sardines about one-seventh.

Cold storage holdings of frozen fish on Dec. 15, 1934, were 73,838,321 pounds.

There are three methods by which heat may be propagated or conveyed from one place to another.

1. *By Conduction.* Heat passing from one part of a body to another part of the same body, or from one body to another in physical contact with it, without displacement of the particles of the body, is said to flow by conduction.

2. *By Convection.* Convection is the transfer of heat from one place to another within a fluid (gas or liquid) by the mixing of one portion of the fluid with another.

3. *By Radiation.* All bodies give off heat in the form of radiant energy, which is propagated in all directions as a wave motion in the ether. Radiation falling upon a body is absorbed by it either wholly or in part. If two bodies, one hotter than the other, are placed within an enclosure, there is a continual interchange of energy between them. The hotter body radiates more energy than it absorbs; the colder body absorbs more than it radiates. Even after equilibrium of temperature is established the process continues, each body radiating and absorbing energy.

Thermal Conductivities* of Material for Refrigeration and Building Insulation

MATERIAL	Apparent Density, Lb. per Cu. Ft.	Mean Temp.	k
Balsa wood	2.2	86	0.023
Cabots quilt	15.6	86	0.027
Cork board	10.0	86	0.025
Cork, granulated	7.3	24	0.028
Cork, regranulated (baked)	8.1	86	0.026
Dry zero (Kapok)	1.0	86	0.020
Flaxinum and fibrefelt	11.2	86	0.028
Gypsum, moulded and dried	78.0	68	0.25
Hair felt	11.0	86	0.022
Hairinsul	6.3	86	0.023
Insulating boards, Insulite, Celotex, etc.	16.0	86	0.028
Insulux or pyrocell	8.0	86	0.029
Insulux or pyrocell	12.0	86	0.037
Insulux or pyrocell	18.0	86	0.0499
Insulux or pyrocell	24.0	86	0.064
Insulux or pyrocell	30.0	86	0.833
Linofelt	11.2	86	0.025
Lith	14.3	86	0.033
Rock cork	16.0	86	0.028
Rock wool	14.0	86	0.023
Sil-O-Cel	10.6	86	0.026
Thermofl	34.0	86	0.050
Wool felt	20.6	86	0.030

*For unit area, the resistance of the plate to heat transmission is L/k ; the conductance, k/L . In this expression, k is called the thermal conductivity of the material of the plate.

The thermal conductivity of a substance may be defined as the quantity of heat (B. T. U.) that flows in a unit of time (1 hr.) through unit area of plate (1 sq. ft.) of unit thickness (1 ft.) having unit difference of temperature (1 deg. Fahr.) between its faces.

The thermal conductivity of different materials varies greatly. For metals and alloys, k is high; while for certain insulating materials, as asbestos, cork, and silk, k is very low. In general, k varies with the temperature

(Concluded from page 28)

brine connection at the plant or an ammonia connection at the plant—in fact any type of refrigeration available.

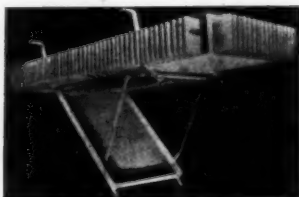
Second is an Icefin plate which is installed in the ceiling of the body, using dry ice as the refrigerant.

Third is the Icefin portable unit, which also uses dry ice as the refrigerant. This is mounted near the ceiling on the inside of the body.

Illustrations on page 28 show the plate and Icefin units.

Frigid-Fin

THE Frigid-Fin dry-ice tanks made by the Meyer Body Co. are installed in any of the bodies made by that company. They utilize the energy from the dry ice to the best advantage. The tanks contain an underfeed pan which is a receptacle for the cake of dry ice. The lat-



ter, therefore, is loaded through the refrigerator door of the body, thus eliminating overhead hatchways at top.

The pan, shown herewith, is pushed up into place once the dry ice is placed

in it. There are two hold-over tanks, one in either end of the Frigid-Fin tank. These are chilled and frozen by the dry ice and have a tendency to hold over the temperatures after the dry ice is dissipated. Thus only a small amount of refrigerant is needed.

These tanks are light and take up about 8½ inches of headroom.

Commercial tests in the use of solid CO₂ in connection with apple storage have been carried out by the U. S. Department of Agriculture. Earlier experiments have shown that Jonathan apples placed in an atmosphere containing 25 to 35 per cent of CO₂ gas for 24 hours prior to cold storage will keep through the storage season without developing soft scald.

Soft scald is a physiological disorder which is quite different from ordinary storage cold, and is not controlled by oiled wraps.

The effect of the gas is similar to that of reduced temperatures in cold storage plants—namely, to suspend respiration of the apple.

The cost of the dry ice used in the test was a little less than icing.

Dry ice has been used commercially since 1925. It has been known to science nearly a century. Its increased consumption has been phenomenal, more than 200,000,000 pounds now being utilized annually.

Plymetl

PLYMETL for refrigerator body construction is light in weight, strong, furnishes good insulation for its thickness, and takes attractive paint finishes.

Plymetl consists of a stiff plywood panel to which is firmly cemented metal face or faces. The steel used is copper-bearing, zinc coated; hence highly rust resistant. It is generally supplied in 27 gauge.

Inasmuch as it has approximately forty to fifty times the stiffness of sheet steel the same weight, designers can take advantage of its enormous strength to space body uprights at wide intervals, thus reducing loss of heat through body posts and also simplifying construction. With Plymetl for both exterior and interior panels, the builder can use any type of insulation desired.

It is available in thicknesses of ¼, ½, and ¾ inches, and in stock sizes up to 48 x 144 inches. It is supplied in Grade VE, metal one face; Grade EVE, metal two faces.

In conjunction with Plymetl, many builders use Phemaloid compound lumber, a resin glued plywood which is extremely durable. The resin adhesive used is immune to moisture and bacteria growth, the principal cause of rot; ¾-inch makes an excellent floor. Where interior lining panels of plywood are required, ¾-inch construction is generally employed.

Both Plymetl and Phemaloid are products of the Haskelite Manufacturing Corp.

Fruehauf's New Brine-Cooled System for Trailers

A NEWLY developed brine-cooled refrigeration system, for use in trailer bodies, has just been announced by the Fruehauf Trailer Co., Detroit.

At the request of a large mid-west packer this new design was put to a severe test before it went into production. A fully insulated Fruehauf Trailer, equipped with the refrigerating unit, left Denver at noon one day last summer. Temperature of the interior when sealed was 46 degrees. Not quite three days later the seals were broken in Chicago by company officials. Interior temperature had fallen 17 degrees to 29, against an outside reading of 80.

The load, which included fresh pork loins packed in wooden boxes, frozen pork butts in fibre drums, lamb liver in pails, and pork kidneys, was in perfect condition as to appearance, color and quality. Maximum product temperature was 31 degrees—minimum 20 degrees.

It was especially significant that the variation from high to low of the pork loins, which were intentionally distributed in all parts of the body, was only 1 degree (from 29.50 to 30.50).

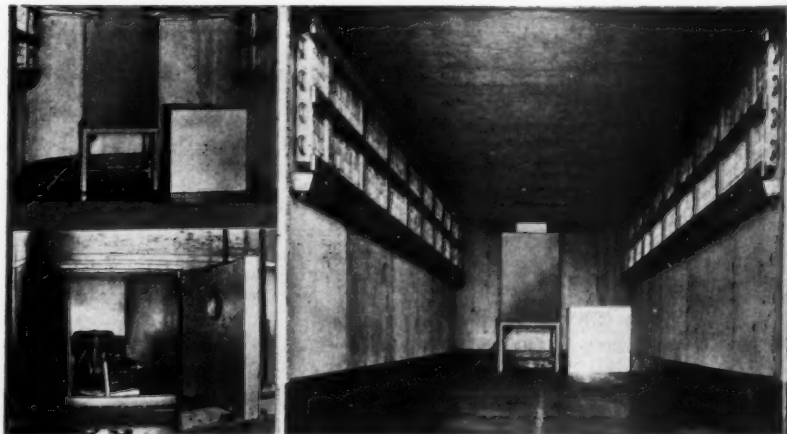
This refrigerating system, according to Fruehauf, was not designed to compete with other mechanical systems. It was developed for those operators who cannot afford the more elaborate and more convenient types. And, while results are equally satisfactory, the unit is

not thermostatically controlled, the ice and salt used for a refrigerant must be replenished regularly, and other refinements have been omitted to keep first cost down. In short, this system is for the man who could not otherwise use mechanical refrigeration of any kind.

By means of a brine tank and a pump, driven by a four-cycle, air-cooled, ¾-1 H. P. gasoline motor, brine is circulated through copper pipes, which run the full

length of the body on either side at the roof. Aluminum radiating fins around the pipes spread this cool air evenly throughout the body.

In the usual arrangement, the motor is placed in a compartment at the front where it is accessible from the outside through a small door. The brine tank, then, is in extreme front interior, the pipes extending to rear. It is possible to vary this to meet individual needs.



Illustrating Fruehauf's low-cost method designed to supplant more elaborate installations.

Adams Trucks Haul Perishables 1,200 Miles

TRUCK refrigeration is no mere question of perfecting a traveling icebox. In long distance hauling, preservation of perishables requires something more enduring than ice.

The Adams Union Truck Terminal, identified with the Adams Transfer & Storage Co., Kansas City, Mo., reaches more than two thousand station points throughout the Southwest. It has about forty refrigerated trucks and uses them on any haul up to 1,200 miles. The Adams organization has been operating refrigerated trucks for five years, and solves the temperature problem with electrically-driven mechanical equipment consisting of Whitaker-Upp constant voltage generators mounted under the engine hoods.

These generators enable the trucks to maintain constant voltage at varying speeds of the motor, and the same predetermined temperature at the end of the trip as at the beginning. If desired the trucks can be further cooled when parked at the loading platforms, as each has an extension cord to be plugged into city power when the engine itself is not running.

In transit, the Peerless blower type evaporator circulates cold air through the load.

The ice machine itself is automatic, controlled by thermostat.

A thermometer placed in view of the driver shows him the inside temperature of the truck.

With this method of temperature control, articles (for example, candy) which do not require refrigeration but need protection from excessive heat or excessive cold can be traveled as safely as commodities needing freezing temperatures.

Nor do commodities perish when they reach their destinations. A twenty-hour advance arrival notice is given to

customers so that they may be waiting for their goods. The Chicago Terminal manager obtains this record of shipments passing through Kansas City by means of Tele-typewriter service. In addition, the customer is protected by the heavy insurance which each truck carries.

Evidence of the effectiveness of its refrigeration method, is the increasing demand for such service by Adams customers.

In the words of D. S. Adams, president of the warehouse company, the system has been "a distinct success."



All loads are insured against loss from spoilage. Mechanical refrigeration is used throughout.

In a letter from one of the deans of the warehousing industry, we are pleased to read the following paragraph.

.... "There are few business periodicals that are so closely in touch with the special industry that you represent so fully and faithfully. I wish you and your associates continued success for the future."

It is "D & W's" intention and desire to carry on in the future the same policies as in the past.

NRA Code Developments

"Offering to Furnish" Is Subject of Proposed Addition to Merchandise Code

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

An amendment to the definition of "merchandise warehousing trade" as it is set out in that industry's Code has been suggested to NRA by the national Code Authority in an effort to combat a type of unfair competition which has sprung up, and it is now being considered by Deputy Administrator Charles P. Clark and his associates.

As amended, the industry would be defined as follows:

"The term 'Merchandise Warehousing Trade,' or 'Trade,' as used herein, includes furnishing, or offering to furnish, for a consideration, warehousing services for goods, wares, and/or merchandise, . . ."

The addition is "or offering to furnish." It has been found that many persons having space suitable for the storage of materials owned by the Federal Surplus Relief Corporation, but not engaged in the warehousing Trade, have been submitting bids in competition with operators abiding by the Code. The rates charged by operators are published and the newcomers have the advantage of knowing what is the minimum bid that a codified operator may submit. With this information at hand it is an easy matter to underbid those conforming with the Code, and to obtain the contracts. Of course, the storing of Government merchandise for hire makes the property owner subject to the Code, but by that time the competitive bidding is over and the damage has been done, it is pointed out.

If the amendment is adopted, persons "offering to furnish" space for storage, for hire, will become immediately subject to the terms of the Code, including the filing of minimum charges. This having been done, the competitive advantage now existing will be wiped out.

The national Code Authority also asks an amendment to Article V, Section 2, which now reads: "No employer shall employ any person under sixteen (16) years of age."

The change suggested would add:

"No person under eighteen years of age shall be employed at operations or occupations which are hazardous or dangerous to health. The Code Authority shall submit to the National Industrial Recovery Board for approval within thirty (30) days after the approval of this amendment a list of such operations or occupations.

"In any State an employer shall be deemed to have complied with this provision as to age if he shall have on file

a certificate or permit duly signed by the authority in such State empowered to issue employment or age certificates or permits showing that the employee is of the required age."

A health and safety program for the benefit of employees would be required if the following amendment, also sponsored by the Code Authority, is adopted:

"Article V, Section 3. Every employer shall make reasonable provision for the safety and health of his employees at the place and during the hours of their employment. Standards for safety and health shall be submitted by the Code Authority to the National Industrial Recovery Board for approval within six months after the effective date of this amendment. After approval, such standards shall become the minimum standards of safety and health for all members of the Trade and shall thereafter be a part of this Code and enforceable as such."

Last of the series of amendments is one which would effect a slight change in the section dealing with labor provisions, changing Section 1 (d) to read as follows:

"No employee whose full-time weekly hours as of July 1, 1933, are reduced, by reason of the provisions of Article III of this Code, by less than twenty per cent shall have his full-time weekly earnings as of July 1, 1933, reduced. No employee whose full-time weekly hours as of July 1, 1933, are reduced, by reason of the provisions of Article III of this code, in excess of twenty per cent shall have his said earnings of July 1, 1933, reduced by more than fifty per cent of the amount calculated by multiplying the reduction in hours in excess of twenty per cent by the Code hourly rate."

The change consists of addition of the words "in excess of twenty per cent of the Code hourly rate."

—James J. Butler.

Would Lessen Liability of Truck Authority's Members

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

MEMBERS of the national Code Authority for the trucking industry would be absolved from personal liability arising out of mere errors of judgment under an amendment to the Code, as proposed to the NRA.

The approved pact extends liability to Code Authority members for "misfeasance"—which is the doing of a lawful act in an unlawful or negligent manner.

As it is proposed to amend the code, they would be liable only for "malfeasance"—which consists of action in all respects unlawful.

—James J. Butler.

Time for Filing Household Goods Code Budget Extended by Administration to June 6

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

BY direction of the National Recovery Administration the President's order which requires all codified industries to submit budgets for approval not later than March 31 has been extended to June 6 insofar as it relates to the Code Authority for the Household Goods Storage and Moving Trade.

NRA also lifted the bar against the Code Authority making expenditures or incurring obligations not provided for in a budget.

This action was taken in order to allow more time for the recently created permanent Code Authority to organize for administration of its compact. The group was ballotted on several months ago, but formal appointment was deferred by the Administration during the period when consideration was being given the discontinuance of the furniture movers' code; because of that fact, organization and estimation of administration costs were delayed.

—James J. Butler.

Kennelly Is Chairman of National Authority for Household Goods Trade

THE national Code Authority for the Household Goods Storage and Moving Trade held its first meeting at Chicago late in March, and elected officers as follows:

Chairman, Martin H. Kennelly, president Werner Bros-Kennelly Co., Chicago. Mr. Kennelly is a past president of the National Furniture Warehousemen's Association and was chairman of the temporary Code Authority which operated before the permanent Authority was elected by the Trade.

Vice-chairman, Clarence A. Aspinwall, president Security Storage Company, Washington, D. C.; president Washington Warehousemen's Association.

Secretary, Ralph J. Wood, president Lincoln Warehouse Corporation, Chicago. Mr. Wood is secretary of the N. F. W. A. and was secretary of the temporary Code Authority.

Treasurer, James F. Keenan, president Haugh & Keenan Storage & Transfer Co., Pittsburgh. Mr. Keenan is a past N. F. W. A. president and is president of the Pittsburgh Chapter of the Pennsylvania F. W. A.

The Authority's executive committee comprises the four officers and the National's president, Marion W. Niedring-

haus, president General Warehousing Company, St. Louis.

It is announced by Mr. Niedringhaus that "the by-laws and the Code are being changed to conform more closely with the standard Code requirements." Further:

"This will require administrative action in Washington, and in the meantime a budget is being prepared and active organization under the Code will take place immediately upon receiving orders from Washington."

NRA Approves Merchandise Authority as Elected

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building

THE National Recovery Administration announced on April 11 that it had approved the personnel of the Merchandise Warehousing Trade's national Code Authority as elected at New Orleans last February. The group is headed by D. S. Adams, president of the Adams Transfer & Storage Company, Kansas City, Mo., as chairman by virtue of his position as president of the merchandise division of the American Warehousemen's Association.

—Edwin Hartrich.

An NRA Law in Michigan Fails of Enactment

MICHIGAN'S proposed State NRA Act, designed to establish State Codes of Fair Competition, was abandoned by its Legislative sponsors in April after it had been defeated in the lower House by two votes.

The measure had aroused active antagonism by virtually all organized manufacturers and many retail groups.

Government Assurance

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

THE national Code Authority for the trucking industry has been assured by Government officials that the contemplated purchase of 18,700 trucks by the Department of Agriculture does not mean future competition with the foreign trucking industry.

The vehicles will be used by the Civilian Conservation Corps, due to probable increases in the size of that Government unit.

—Edwin Hartrich.

Truck Code Appointment

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

J. B. MOOR, of this city, has been named by NRA as administration member of the trucking industry Code Authorities for the State areas of Texas, New Mexico, Oklahoma, Louisiana, and Arkansas, with headquarters at Dallas.

Mr. Moor will represent NRA at Code meetings but will have no vote.

—George H. Manning, Jr.

NRA Disapproves Payment of Warehousemen's Commissions to Customs House Brokers

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

AT the request of the Code Authority for the Merchandise Warehousing Trade, Leighton H. Peebles, Administrator of the Public Utilities Division of the National Industrial Recovery Board, has handed down an interpretation of Article XI, Paragraph 4, which pertains to unfair trade practices.

The question of unfair trade practice having been raised by certain members of the Trade, the Code Authority submitted the following question to the Administration for an interpretation:

"Where members of the Trade pay or offer to pay commissions to Customs House brokers who have control of imported merchandise of importers or others for the purpose of storing such merchandise with members of the Trade subject to the Code, in order to induce such brokers to store merchandise with such members, are such members violating the provisions of Article XI, Paragraph 3, of the Code?"

Before the interpretation was made, the Code Authority was requested to issue a bulletin to all members of the Trade quoting the text and stating that a request had been made to the Administration for approval of an interpretation. That was done. One member of the Trade circularized the proposed interpretation among the Customs House Brokers, whose trade practices are not regulated by any Code of Fair Competition, and as a result three protests were received. The protests were then given consideration but were found to be without merit.

The interpretation, approved by Deputy Administrator C. P. Clark, the Code Legal Advisor; by the Research and Planning Division; and Industrial Advisory Board, follows:

"Customs House Brokers who have control of imported merchandise of importers or others for the purpose of storing such merchandise with members of the Merchandise Warehousing Trade subject to the Code are considered to be 'representing customers or prospective customers' of such members of the Trade within the meaning of Paragraph 4, of Article XI of the Code.

"Where such members of the Trade pay or offer to pay commissions to such brokers in order to induce such brokers to store such merchandise with such members, such members are violating the provisions of Article XI, Paragraph 4, of the Merchandise Warehousing Trade Code."

—George H. Manning, Jr.

Trucking's Cost Formula Subject to Enforcement

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building

THE cost formula set up for the trucking industry is one of those which may be enforced by the National Code

Authority, under an order issued by the National Recovery Administration clarifying this subject.

Some of the formulae existing under NIRA are merely permissive; others, including the one for truckers, are mandatory. Therefore truckers may be compelled to live up to the letter of the law, it is pointed out.

NRA calls attention to the following:

"(1) There are two types of cost formulas or cost systems—those that are mandatory and used in connection with selling below cost provisions in Codes, and those that are permissive and used for educational purposes only to the extent found practicable.

"(2) Only mandatory systems which are integral parts of Codes when approved, or those specifically approved by NRA, are subject to enforcement. There are many instances where reference is made in a Code to a mandatory system which has not yet been approved by the Board. No attempt should be made to enforce such unapproved systems.

"(3) Code Authorities or any NRA agency who, through misunderstanding or otherwise, have attempted such enforcement have acted without authority."

—H. M. Manning.

Texas NRA Compliance Director Begins Check of Merchandise Plants

THE office of Ernest L. Tutt, NRA Regional Compliance Director in Texas, has inaugurated a check-up of the merchandise warehouse companies in that State to determine to what extent they are complying with the Merchandise Warehousing Trade's Code.

The first plant inspected is that of the Texas and Pacific Terminal Warehouse Company, a Fort Worth firm the manager of which is L. C. Porter, Region No. 7 member of the Trade's national Code Authority.

Selection first of the Texas and Pacific warehouse was at the direct invitation of Mr. Porter.

Alluding to the compliance inspectors' initial effort, B. Frank Johnson, Fort Worth, secretary-manager of the Southwest Warehouse and Transfermen's Association, reported in an April *Bulletin* to members:

"They spent all day Monday checking the records of the various accounts and talking to the employees of the warehouse. Only one small violation was found and that was a difference of some \$30 in the pay of a man who had been recently transferred from driving a truck to office work. The back pay was immediately paid and a clean bill of health was given the Texas and Pacific warehouse.

"At the request of Mr. Porter, G. K. Weathered, former Code Authority member, participated in the checking of the Texas and Pacific warehouse, mainly because it was thought that Mr. Weathered could assist in training the inspectors as to the proper method of checking for trade practice violations.

Mr. Weathered spent the entire day with the inspectors and explained to them just what to look for in checking the merchandise accounts."

The inspectors turned to other warehouses after visiting the Texas and Pacific but declined to reveal their itinerary ahead.

The inspection was started after Mr. Tutt, addressing the recent Hot Springs meeting of the Southwest association, offered to conduct such an inquiry and the association had adopted an resolution authorizing Mr. Porter to effect such an arrangement.

8-Hour Day for Trucking Is Opposed in Resolution Sent NRA by Industry's Authority

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

OPPPOSITION to an eight-hour day in trucking industry has been voiced in resolutions forwarded to NRA by the national Code Authority.

Based on several months of a study not yet fully covered, the survey was undertaken in conformity with a provision of the approved Code which directed that an inquiry be made "with respect to achieving and providing a normal eight-hour day with equitable overtime rates of pay for time worked beyond

such normal eight hours, and for determination of the feasibility and desirability of improvement of the rates of pay and terms and conditions of employment for employees in the industry over those provided under the Code."

The Code Authority sent 10,000 questionnaires to operators. Its negative report on the eight-hour day is based on a finding that 56 per cent of those returned are opposed.

Following is the resolution:

"Whereas the national Code Authority through a joint committee is engaged with the National Industrial Relations Board in an uncompleted study of the questions involved in Subsection 4, Section A, Article V; and

"Whereas the facts thus far available do not indicate the practicability of recommending any changes in the Code with respect to the subject matter of this subsection;

"Now, therefore, be it resolved

"1. That the national Code Authority transmit to the National Recovery Administration full information as to the progress made in the studies;

"2. That the national Code Authority recommend that no change in the provisions of the Code with respect to matters referred to in this subsection be urged at this time;

"3. That the national Code Authority urge upon the National Recovery Ad-

ministration the necessity for immediate and adequate measures to effect and maintain the stabilization and sufficiency of rates and tariffs for services performed by members of the trucking industry before additional burdens of expense through the increased labor costs are required to be assumed by members of the industry;

"4. That the national Code Authority recommend that authority be given to further study, in cooperation with the National Industrial Relations Board, the questions involved, with the duty to make a report within the further period of three (3) months from April 1, 1935."

—H. M. Manning.

Would Raise Wages of Clerks, Dispatchers

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building

THE trucking industry's national Code Authority has asked NRA approval on a proposed Code amendment increasing wage rates for rate clerks and dispatchers.

The increased minimum wage rates would be based on a population scale, ranging from \$18 weekly in cities of more than 500,000 to \$16.80 in cities less than 250,000. The present minimum wages are \$15 and \$14, respectively.

—Edwin Hartrich.

Analyzing the Business You Don't Get

"THE business he doesn't get and why he doesn't get it. That's what a mover or warehouseman needs to think about. What he has gotten is water under the bridge and doesn't require much thought."

So says H. E. Dalton, secretary and manager of the transfer and warehouse department of the Shufflebarger Transfer & Storage Co., Inc., Albuquerque, N. M.

In an effort to get just such information, Mr. Dalton makes a detailed analysis of local moves over an extended period. Building permits and light and water company changes are the principal sources of information. With this data, he is determining what per cent of the total business he gets normally; what per cent through solicitation; and what per cent goes elsewhere.

"A project of this kind takes a good deal of time but it's well worthwhile," according to Mr. Dalton. "If we find we get a large per cent by solicitation, then it will behoove us to increase our solicitation efforts.

"If nearly all of our business comes on a direct call basis, we will have to consider reputation and advertising as the most effective sources.

"When we find out what per cent of the total competitors are getting, we

will know how much extra volume we have to 'shoot at' and can intelligently set out to get as large a share of it as possible. The information on the previous two points will somewhat determine the procedure in going after this volume. We'll also find out something about how competition has gotten this volume—whether it has been their ad-

vertising, service, or what.

"Moving or warehousing business is something you can't sit around and wait for. You have to sell it, just as you do merchandise. But, to do so effectively, it is necessary to know your potential market and find out what are the best methods of developing it to a maximum."

Bekins Using Radio to Offer Prizes to Children For Tips on Moving and Storage Jobs

THE sales and office personnel of the Bekins Van & Storage Co., operating warehouses in California cities, held a dinner-meeting in Los Angeles on April 2 and plans were announced under which the company will extend its advertising activities to the radio. The occasion was the fortieth anniversary of the Bekins organization, and the speakers included the firm's president, Milo W. Bekins, and the sales manager, Henry M. Burgeson.

The Bekins sales organization will endeavor to reach prospective clients through boys and girls, and the radio program to be inaugurated will accordingly be of interest particularly to children. The broadcast, prepared by the company's advertising counsel, will be

in the form of a mystery and adventure series featuring a mysterious emperor and the intrigue in his mythical kingdom.

Prizes, such as rings and magic books and tricks, will be given in return for "leads" turned in and for other evidences of interest displayed by youthful listeners. On the theory that children in a family are the first to tell of plans to move, and with tempting prizes offered, it is believed that the listeners will scour their neighborhoods to find someone in need of moving, storage and allied services.

The Bekins radio program will be on the California Don Lee network in California every Friday from 5:15 to 5:30 P. M.

Let's Take the Family Album Out of Storage!

"I'll get there if I have to go on crutches," is an almost bromidic declaration. It took Theodore Franklin Cathcart of Atlanta to make the threat quite literally and also to put it into operation.

Mr. Cathcart was struck by an automobile early in 1934 but when the Mayflower Warehousemen's Association held its third annual convention, at the Columbia Club in Indianapolis in February, the gentleman from Georgia was among those present, accompanied by cast, crutches, and all the other accoutrement incidental to a broken leg.

While in the northern city he celebrated his birthday and received the congratulations of the entire convention both on his anniversary and for his pluck in being at the meeting.

Mr. Cathcart is president and senior partner of the Cathcart Cartage Co. in Atlanta and a native of the territory whence Sherman started his famous march to the sea. He was born in a small town known as Hiram, Ga. His natal city did not enjoy the convenience of a railroad.

As a boy, young Cathcart went to a country school, but the greatest part of every year was put into work on his father's farm.

Although the elder Cathcart was prosperous in a modest sort of way, the son was trained in the well-known school of hard knocks. The family arose at 4 a. m. and worked hard until well nigh unconscious at night. This early life of drudgery and hardship provided plenty of education along the lines of rugged Christian honesty but it left little time for recreation or reading.

In other words, while the farm provided ceaseless work for the hands, it made few demands on the mind, thus leaving the young man's fancy free to dream of better things. So, instead of allowing the grind of labor in the fields to crush his spirit, he built air castles—not in Spain but right at home in America, the land that, before all others, gives an unknown poor boy an opportunity to make a fortune for himself.

After he had grown to manhood he saw little inducement to hang around the country and break his back over a hoe. So he went into Atlanta, where he took a post graduate course in the batterings, the buckings, the privations of setting himself up in business on the famous shoe string.

His first venture was a tobacco store—a tiny 8-foot hole-in-the-wall. He has never had a job and never worked for anyone but himself.

His first stock was a small wheelbarrow of tobacco and cigars. Most of it was disposed of on credit, and for some he never collected. But he saved the coupons. In time he assembled tags enough to trade in for a sewing machine valued at \$15. He sold it for \$25.

But even this usurious percentage of profit failed to enable him to break even with the credit system of conducting business—or, at least, it would have failed had it not been for one saving grace: as the days went by, there were more tobacco tags accumulating—pockets full, cigar boxes full, lard cans full.

One of his chief creditors was a man who conducted a warehouse business—conducted it, or so Mr. Cathcart thought, in an exceedingly slipshod manner; but, in spite of bad management and neglect, continued to make money.

This state of affairs set the young tobaccoist to thinking. "If a man can make money by loose methods, there should be no limit to the success one might enjoy by going after things with care and watchfulness," he reasoned.

He knew someone who had a horse that he believed could be acquired cheaply. It was an antiquated gray nag, first



Theodore F. Cathcart—who founded his warehouse business by swapping tobacco coupons for a horse and harness

cousin to the one that was called Napoleon "all on account of its boney parts." Still, it was a horse. Down the street, in a harness-maker's shop, hung an outfit which looked as though it would fit the animal's gray gables quite admirably.

The shopkeeper happened to have a weakness for tobacco coupons—and young Cathcart was not above trading on this weakness.

"How many hundred coupons will you take for the harness?" he inquired casually.

"Hundred!" echoed the outraged harness maker. "It would take bushels."

The future transfer and storage man never batted an eyelash. He had plenty of tags and it was easier to measure than count them. He was speaking his own language when discussing tobacco tags, for he could fill a peck measure, strike off the top with a straight-edged ruler—and tell, within six, the exact number left.

The deal was finally consummated by the delivery of the tobacco tags in peck measures.

The harness made no attempt to cover the old gray mare's stickups and stickouts, but it was a becoming outfit nevertheless, softening the harsh outlines as ivy covers a crumbling wall. The animal's feet did not exactly "track," for, like a

(Concluded on page 59)

Developing New Business for Warehouses

No. III

Automotive
Accessories

Possibly hundreds of manufacturers of parts will query public warehousing in 1935. Will they undertake a cooperative plan to serve their own industry?

H. A. Haring Suggests

A Seasonal Opportunity

IN our issue for March we called attention to the shift in marketing of "genuine" parts for automobiles, whereby the automobile manufacturers are thinking more of their dealers. And, in the effort to help the service stations to show a profit, these manufacturers are considering multiple spot stocks in public warehouses. By the same means they hope to stifle competition from "gyp" manufacturers—that word, in automobiles, meaning any producer of parts other than the car-maker himself.

Forgetting, for the moment, the "genuine" part, we shall now look at other accessories of the automobile, either passenger car or truck, and particularly those required for the shop which has a repair job on the floor.

Many of these items, in the mind of the car-maker, would be looked upon as "gyp" products, although we are not considering them in that light. We have in mind everything needed by an automobile from front bumper to tail light, as well as the tools necessary for ordinary repair work.

These goods have reached the repair shop through a jobbing house.

"Years ago," states one accessory-maker, "the jobber

was the only source of a product. He bought in large lots and doled out to the garages as they needed goods. But, due to business conditions of late, these jobbers try to work on reduced inventories and more rapid turnover. They demand closer warehouse stocks of the manufacturer.

"In fact, even the jobber of today wants to buy single items. He is as helpless as the garageman, who one day needs a part desperately but who has no idea when he will get a call for exactly the same size or type of part again. So the jobber finds it unprofitable to carry heavy stocks. Often he has the veriest skeleton of stocks—nothing to compare with inventories of six years ago. Inasmuch as he cannot afford to carry everything for his trade, he goes to the other extreme and stocks nothing. Then he turns to us, like a grinning baboon, and expects us to have it where he can telephone."

This condition may seem strange, or even new, to these manufacturers of motor equipment and accessories. It is not. It is what other trades have faced and conquered. It is the old problem of small-lot buying run wild—a situation which has ruined old-style jobbing houses and brought upon us a host of new-type jobbers who work from an office but hardly know a stockroom.

BUSINESS volume for repair parts was greater in 1934 than in 1929 but during the five intervening years the number of wholesalers had doubled. The resultant volume per wholesale house was therefore smaller.

It does not solve the difficulty to call names. One tool manufacturer enjoys speaking of them as "shade tree" jobbers, or "candle light" wholesalers, but by so doing he does not alter the fact that jobbing has ceased to be the stocking of huge volumes of goods, arriving in carloads. Jobbing, today with accessories as with food and drugs, is chiefly the ability to sell and then to make quick delivery. That jobbing house seems to show best profits whose management is most clever in knowing where to get goods speedily without buying a carload.

"Warehousing is scarcely a part of jobbing today," is the belief of a manufacturer of batteries. "Even large capital is a thing of the past. Parlor jobbing is more shoe leather and wits than anything else, with the manufacturer assuming the warehousing obligation."

And, with the thousands of items and sizes and models, plus the large number

of models of cars on the road, there is no reason to expect a jobber of automotive parts to have in stock everything he will want. The new models of each season make the condition a bit worse.

A maker of springs or axles quite naturally keeps in stock an ample quantity of each size for every car model for the past fifteen years. So the manufacturer of carburetors and fan belts. But no jobber can afford to duplicate that stock for each of these items and the three hundred others in common use, let alone nearly six hundred items of less frequent demand.

Yet jobbing firms go on multiplying. They do business on tiny stocks of goods.

Inasmuch as they are relieved of the capital requirement for complete stocks, young men can set up in business for themselves in a manner not possible a few years ago. Hardly a city of ten thousand people, throughout all this country, is without one or more automotive jobbers. They serve the community, not by having on hand a big variety of goods but by knowing where to find anything under the sun and how to get it in a hurry. For this service—

which is very real in value to the repair man and the car-owner—these jobbers deserve every cent of the margin of profit allowed them in the trade.

The Warehousing Question

AS shown in our issue for March, the car-maker feels the need to maintain spot stocks closer to every repair man.

In order to compete with this servicing of "genuine" parts every manufacturer of an accessory or a replacement or a tool for passenger car and truck faces the identical problem.

"Unless we do set up spot stocks," says a maker of brake linings, "we can not hold our trade. When the jobber can draw separate pieces of goods from a warehouse he can shift from one brand to another without the least effort. The big thing is to lay hands on the goods quickly. If ours are six hours farther away—no matter how great may be the preference for ours—the six hours loses us the sale. We must warehouse wherever our competitors do, because we must equal or better their deliveries."

The very nature of the parts business demands spot stocks.

It is highly competitive in the thinly-populated areas of Nevada quite as much as in the crowded streets of Detroit. The independent parts manufacturer competes with the car-maker, as "gyp" against "genuine", and one independent competes with others. With many "distributors" in the marketing centers, who handle the goods of a single maker, and with even more jobbing houses, which aim to deliver anything of any make, no one wonders at the large number of jobbers under one name or another.

They are, in effect, nothing but salesmen for parts. Instead of a salary and expense account, they are paid a discount from list price—this being quite similar to the salesman's commission. Naturally the manufacturer must furnish capital for the goods by maintaining warehouse stocks.

Until the present time the prevailing method has been to operate branches with the usual storeroom. As such stocks have multiplied, one manufacturer after another has learned that they are costly. Few of them are deceived. One manufacturer, about a year ago, wrote a paragraph highly amusing for its frankness. He stated:

"By properly juggling the figures we might persuade ourselves that our stockrooms are not expensive; but when we take all factors into consideration I know they cost far more than we are willing to admit."

One maker of battery and ignition cables, who operates four private stockrooms, said that "where the expense exceeds 2 per cent of the wholesale price of the volume handled it ceases to be profitable. It is then eating off its head."

A manufacturer of mufflers and cut-outs, late in 1934, made this confession: "Our stockrooms are expensive. At best the cost runs from 5 per cent to 16 per cent, including all fees and expenses. Our large stocks run us from 5 per cent to 10. This amounts to quite a lot of money in a year, but it would not be possible for us to maintain our trade position without spot stocks."

For automobile shafts and axles the trade custom is to figure 5 per cent of the wholesale price for handling through warehouse, with 10-12 per cent for freight in carloads.

Yet, in the face of these high costs, every manufacturer of parts knows he must increase the number of spot stocks. The car-makers are doing it; his independent competitors are doing it. He must travel along with them or quit.

To go further into private storing, at branches, would mean ruinous costs.

Therefore one of the most pressing questions before these manufacturers is that of warehousing.

They are uncertain whether to pay the jobber a 5-7 per cent allowance to store their goods for them or to distribute through public warehouses.

Storage Costs

EFFORTS were made in their Codes to unravel this knot. Several of the Codes set up, under "Trade Practices",

ex-warehouse prices, or at least a sort of formula for adding to the price a fixed fee for warehousing and expeditious delivery. Only two trades in automotive parts have come to our attention where the ex-warehouse price was actually inaugurated. Both have dropped it because it was impossible to enforce.

Nearly all these trades, however, are trying to do what the car-makers have done by definitely giving one discount to jobbers and another to dealers. The Codes tried to compel that no one could obtain parts from a manufacturer's stock unless he were a jobber or a distributor "100 per cent." The aim is to keep the repairman and the dealer away from the stock, compelling him to approach through a jobber and not get the jobbing price for his retail purposes. This plan, in a general way, works with automotive parts. Even large dealers buy through jobbers.

A more promising device is that of concealing the warehouse costs.

Jobbers' discounts in the automotive parts trades have been 60 per cent. During the past few years the margin of profit has so narrowed that the 60 per cent rule has been slipping. The effort by car-makers to lower their prices has been a factor, because they also have cut discounts for replacements. The parts-makers, as new price lists appear, are working toward a 50 per cent discount level. The 50 per cent discount will apply to goods ex-warehouse, plus of course an adjustment for the freight equivalent.

Then, when a jobber yells for the old allowance of 60 per cent, he will be told that he may have it for such goods as he orders to be shipped direct from factory.

In effect this plan sets up two jobbing discounts: 60 per cent the rule for factory shipments but only 50 per cent for goods ex-warehouse. The 10 per cent difference will then offset the cost of maintaining warehouse stocks and handling for the convenience of the buyer.

The remarks in our March article as to C. O. D. charges and the tiny parcels will, of course, apply to parts from independent makers as they did to car-makers themselves.

As the manufacturers see the cost, all they know is the huge sums they have laid out for private storing. This, in general, has been the sole method in use, because only a handful of the hundreds of concerns have ever stored with a public warehouse.

Their trade associations have, however, been quite active for nearly a year—trying to assemble opinion and experiences from member-manufacturers, making studies of public warehousing, picturing the trend to members and sending out circulars of data.

Recently one association distributed a 13-page bulletin, closely printed, to acquaint its manufacturer-members with "current and future trends in automotive products warehousing." Another bulletin was called a "collective study by sales managers and others" of the same question.

These bulletins—and other confiden-

tial information distributed to members—frankly speak of warehousing as "expensive." The "expense" rather commonly is based on what it has cost some members for private storing and not the cost of using public warehouses. On this point they hesitate to commit themselves.

One of these bulletins concludes with these three paragraphs:

"Warehousing should be very carefully considered. It is expensive. It adds plenty of additional costs to manufacturing. It relieves jobbers of expense and of capital investment. It tends to make them the retailers so many of them have become. It has educated them in getting away from carrying real stocks such as a wholesaler is expected to carry.

"But it has advantages for all concerned under certain circumstances and conditions. Its long-look-ahead effect on distribution trends, economics and philosophy should be well borne in mind. If a manufacturer leans toward warehousing he should know ALL the reasons why he should do so now, while at the same time endeavoring to grasp something of the picture of the future in the light of what has taken place and is now occurring in distribution.

"Just because your competitor's warehouses may be one of the many excellent reasons for you to do likewise—and it may also be a very splendid reason for you to avoid embarking on a troublesome and costly experiment.

"Consider, also, the possibility of you and your competitors warehousing together!"

A Development to Remember

THAT final sentence is a hint to warehousemen.

It suggests that these manufacturers may attempt what the grocery manufacturers' association started to try just before the depression—set up a vast co-operative warehousing plan to serve their own industry.

There can be, however, no question about this fact:

Many of these manufacturers of automotive parts and accessories will query public warehouses before 1935 is over.

The alert warehouseman will bear in mind that possibly hundreds of manufacturers will experiment with the public warehouse, provided the first comers find the service satisfactory and profitable.

UVL's Business in March Was Better

Business of United Van Lines, Inc., for March was 20 per cent better than during the corresponding month in 1934, according to Daniel L. Britten, Cleveland, UVL's general manager.

The board of directors has voted to abandon the group's debit and credit arrangement and set up in its place a commission form or remuneration. Hereafter each member booking a job will receive a direct commission for his part in obtaining a contract.

FROM THE LEGAL VIEWPOINT

By
LEO T. PARKER

Liability for Deliveries

NUMEROUS Courts have held that anyone dealing with an agent is presumed to know the extent of the power under which he acts, and he cannot escape consequences by his own interpretation of it. Therefore a warehouseman who delivers goods to an agent, or employee of the owner, may be liable if the owner denies that he authorized his agent or employee to accept delivery.

For example, in *Lightning Delivery Co. v. Matteson*, 39 Pac. 938, Phoenix, Ariz., it was shown that a warehouseman accepted goods from a woman for storage and issued a warehouse receipt. Later a relative of the owner of the goods called at the warehouse and demanded delivery of the goods. The warehouseman refused to make the delivery, but sent a telegram to the owner, as follows:

"Wire immediately authority to release your goods to William Matteson."

This message was delivered to the owner of the goods that evening at eight o'clock. She did not answer it by wire, but two or three days later she wrote the warehouseman acknowledging receipt of the telegram and requesting him to write her an explanatory letter. Before the letter was received, however, the warehouseman delivered the goods to her relative.

In surrendering them to the relative the warehouseman acted upon a telegram which he had received that day and had thought was an answer to his wire to the woman the day before. The telegram read: "Deliver storage goods in my name to Wm. F. Matteson."

The person who sent the wire authorizing the warehouseman to deliver the goods to Matteson, a relative of the owner of the goods, had a power of attorney from the owner of the goods to "buy, sell or mortgage all properties" belonging to the owner.

Notwithstanding this power of attorney, the higher Courts held the warehouseman liable to the woman for the value of the goods. This Court said:

"It must be kept in mind that under all the authorities powers of the attorney should be strictly construed and that the Courts should never by construction extend the power they confer beyond that given in terms, or is absolutely necessary to carry that conferred into effect. By accepting his statement that he was the agent of the plaintiff [owner] and acting on it, the defendant [warehouseman] assumed

whatever risk such action carried with it; if it [warehouseman] guessed wrong and the power given did not include this authority its responsibility for such loss would be clean.

Delay Voids Mortgage

FREQUENTLY warehousemen accept goods for storage without knowledge that such merchandise is mortgaged. Sometimes the holder of the chattel mortgage takes possession of the goods, without paying the storage charges, on the ground that the mortgage is prior to the warehouseman's lien.

Therefore it is important to know that delay in filing a chattel mortgage may render it void, which results in the warehouseman's lien being prior to the mortgage.

So held a higher Court in *New Bruns-*

Mr. Parker answers legal questions on warehousing, transfer and automotive affairs.

Send him your problems, care of this magazine. There will be no charge for the service.

Publication of inquiries and Mr. Parker's replies give worthwhile information to the industry generally.

wick, Inc. v. Scott, 176 Atl. 375, Newark, N. J.

The facts of this case are that a State law provides that a chattel mortgage shall be recorded "immediately."

The chattel mortgage had been executed, acknowledged, and the affidavit of consideration sworn to about five blocks from the county courthouse, where chattel mortgages are recorded, on May 9, but was not recorded until 3.29 p. m. on May 10.

Later controversy arose as to whether the mortgage was rendered void on account of the delay in recording it. It is interesting to know that the Court held the mortgage void, and said:

"It contains no explanation whatever as to why a day elapsed before recording, when ten minutes should ordinarily have sufficed."

Incorrect Contract Is Interpreted

IN all legal controversies involving written contracts the Courts endeavor to interpret the intended meaning of the contracting parties; and any statement inserted into the contract by one party which is designed or likely or in-

tended to defraud the other party, renders the contract void and unenforceable. Moreover, where one makes a false representation, not knowing whether it is true or false, it is legal fraud as much as though he knew it to be false.

For example, in *Eutsler v. Mixon*, 77 S. W. (2d) 655, Galena, Mo., it was disclosed that a warehouse burned damaging approximately 8,000 cases of merchandise. A contract was made with respect to the damaged merchandise in which it was "estimated about 12,000 cases in said warehouse at the time of the fire."

In holding the contract not valid and enforceable, the Court said:

"The introduction of the words 'more or less,' or 'about' or 'estimated,' in a conveyance or contract for conveyance, does not afford a shield against liability for false representation."

A Railway Company's Motor Transport

CONSIDERABLE controversy arises from time to time as to whether subsidiary corporations, such as motor transportation companies, owned, controlled, and operated by railroads to carry on pick-up and delivery service for less than carload lots of freight, are under the jurisdiction of the State Public Service or Utility Commission as an entirety with the railroad company.

This was held to be true in the recent case of *Atchison, T. & S. F. Ry. Co. et al. v. Railroad Commission of Texas et al.*, 77 S. W. (2d) 773, Austin, Texas.

In this case the State Commission issued an order requiring a railroad company to establish joint through rates and routes, and the interchange of the traffic thereon between the railroad company and three organizations known as motor transport companies.

The railroad company sued to enjoin enforcement of this order. During the trial, the railway company, in order to meet truck competition on short hauls, inaugurated, through the agency of the Motor Transport Company, a pick-up and fast delivery service at warehouses and stores of shippers of less than carload lots. The Motor Transport Company is a subsidiary of the railway company.

The Court upheld the order of the State Commission, and said:

"And in such case where the stock of such separate corporation is owned by the railroad company, and its sole function is merely to help conduct the business of the parent corporation under

whose complete control it operates, and in the instant case largely, if not wholly, through the same employees, the subsidiary corporation will be treated as if it were a mere department of the railroad itself. The contracts whereby the transport companies undertook to make such railroads their agents in such transportation of freight were clearly ineffective to change the status. . . ."

Unfair Competition by Former Employee

THE law is well settled that a Court will grant an injunction against a former warehouse employee who engages in competitive warehouse business or takes employment with a competitor of the former employer.

This is true because such competition may involve unfair or fraudulent use of trade secrets which constitute a valuable part of the good will of the former employer's business.

However, various Courts have held that this power of a warehouseman to prevent a former employee from freely carrying on a lawful warehouse business will be exercised with great caution.

If, for example, the testimony shows that there were no trade secrets or data regarded by the employer as confidential, or that such secrets were unknown to the particular employee involved in the suit, or that no use was made of such secrets in the solicitation of business, then the Courts will not hold the employee liable to the employer.

However, a Court will issue an injunction against continuation of unfair practices by a former employee where it is proved that such employee had access to confidential matters relating to the former employer's business and that he utilized such information to his own advantage after entering into business for himself, or accepting employment with a competitor.

For illustration, in the late case of *Scavengers*, 24 P. (2d) 489, San Francisco, it was disclosed that an employee was engaged in the bookkeeping department of the company. Afterward this employee entered into a competing business for himself, and the former employer filed suit, contending that the employee had directly utilized confidential information obtained while in the bookkeeping department.

Inasmuch as the evidence indicated that a considerable part of this allegation was true, the higher Court granted an injunction against the employee continuing such practices.

Complaint Delayed

THE Courts have consistently held that they will not revoke a certificate if a motor truck owner delays an unreasonable period of time in filing a complaint where a Commission has granted a certificate to a competitor permitting the latter to operate in the former's territory.

For example, in a recent case (193 N. E. 407) it was disclosed that a truck owner applied and received a certificate from a State Commission to extend his route in territory served by another transportation company. After the expiration of two years the transportation company filed legal proceedings to invalidate the extension of the route of its competitor, on the ground that when granting the extension the Commission had failed to conform with the State laws.

However, as the company had delayed longer than two years in filing the complaint, the Court refused to revoke the certificate of extension.

Truck Owner Not Liable

VARIOUS Courts have held that the owner of a motor truck never is liable in damages for an injury if the evidence indicates that the person for whom the hauling was being done, when the injury was sustained, directed the shipment and had control over the driver.

So held a higher Court in the late case of *Hazard v. Great Central Trans. Corp.*, 258 N. W. 210, Detroit.

The facts of this case are that the Great Central, a Michigan corporation, engaged in transporting merchandise and freight for hire, under contracts with shippers. It had no trucks of its own and made contracts with owners of trucks by the terms of which the transportation company directed the shipments, instructed the truck drivers, and controlled the operation of the trucks.

One day one of the trucks collided with another vehicle, seriously injuring the driver, and the latter filed suit to recover damages. In relieving the truck owner from liability, and holding the transportation company liable, the Court said:

"A servant is a person subject to the command of his master as to the manner in which he shall do his work. The relation of master and servant exists where the master can not only order the work but how it shall be done. When the person to do the work may do it as he pleases, then such person is not a servant."

Warehouse Held Not Liable for Injury

IT is well established law that a warehouseman never is liable in damages for an injury effected by a motor truck while the driver is using the vehicle for his own purposes, or without consent of his employer, or while he acts in disobedience to his employer's instructions.

For example in *Haynes v. Stroh*, 193 N. E. 721, Banc, Ind., it was shown that after a truck driver had finished his day's work he drove the truck for his own convenience only, and without his employer's knowledge or consent, and parked it in front of the rooming house where he lived. While the truck was

there a driver of another machine collided with it, and filed suit against the owner of the truck to recover damages for injury sustained.

In holding the truck owner not liable, the Court said:

"It is well settled that where an employee, either with or without the consent of the owner of a vehicle, uses such vehicle for purposes of his own, when not on regular duty, and an injury to another results by reason of his negligence, the owner of such vehicle is not liable."

Collecting Charges on Goods Long in Storage

LEGAL EDITOR, *Distribution and Warehousing*: We have a problem we would like to solve. We have seven bales of cotton stored with us around eleven years. The storage on this cotton is more than the cotton is worth.

When we bought the warehouse, eleven years ago, there was accumulated storage of \$150, which we paid in advance to the seller of the warehouse when we took it over. Since that time we have continued to store this cotton until today.

The customer who stored this cotton borrowed money from the bank on the seven warehouse receipts. It seems that this note has been continuous with the bank until the present time. During the past year or two, however, the First National Bank here has been in liquidation. We called on the receiver and asked him for the warehouse receipts, to save Court costs, so that we could sell the cotton for the storage. The receiver refuses to give up the warehouse receipts, stating that, in his opinion, we can collect only six years' storage.

What we would like to know is whether we are entitled to full storage on the cotton, or how we can get our money. Any information that you can give us will be greatly appreciated.—*Spartanburg Bonded Warehouses, Inc.*

Answer: With respect to selling the cotton to secure the charges, to which you are legally entitled, the various State laws differ in details of procedure which a warehouseman should follow in order, without chance of liability, to sell stored goods for storage charges. The laws require a written notification to the owner of the goods notifying him when the goods will be sold; and advertising in a publication for a period of time specified by your State law, the intended sale of the goods. After this they must be sold *strictly* in accordance with your State statutes.

Failure to adhere to these rather complex laws will result in your being liable to the owner of the cotton for the value thereof. Therefore you should consult a local attorney familiar with warehouse laws and especially with the details of procedure; otherwise you may not strictly comply with such laws.

With respect to the amount of storage charges, it is my opinion that you are entitled to collect the full amount, including the \$150, you paid to the seller

of the warehouse when you took it over, providing the accounts receivable were assigned to you strictly according to the State statutes at the time you purchased the warehouse.

There may be complications as between the bank and yourself. For instance, if, when the bank loaned the money on the receipts, you performed any act or made any statement which may be construed to indicate that your lien would be second in priority to the bank's lien, then the bank can collect its money due before yours is paid. Moreover, if the bank notified you that the loan was being made and demanded to know if its prior rights would be conceded and you made no response, such silence may be construed to indicate consent to the proposal. If, however, the bank knew the cotton was in storage and loaned money on it without making proposals, the situation is different and according to higher Court decisions you are entitled to recover full storage charges. See following cases: 127 N. Y. S. 306; 137 Mass. 201; 84 N. Y. S. 1007; 224 N. Y. S. 71; 247 Pac. 166; 257 N. W. 436; 171 N. E. 749.

Responsibility When Goods Are Missing

LEGAL EDITOR, Distribution and Warehousing: About three months ago a customer hired us to transport and store goods from a warehouse in a

different city. The owner of the warehouse assured us that the load checked O. K., and our driver signed a receipt. At that time we had no way of knowing whether we had received every piece the list called for. On arriving at our warehouse with the load we found everything in good order. However, the customer came to us after examining his household goods and insisted that an upholstered chair was missing and that we should pay him for it.

Are we responsible for the value of this chair, which the customer claims is worth \$35, or is the warehouse responsible?—*Rapid Transfer Company.*

Answer: It is my opinion that you are liable for loss of the value of the chair because, first, the delivering carrier is ordinarily liable for missing merchandise; second, when a warehouseman signs a receipt admitting receipt of merchandise he is liable for its loss unless he can prove conclusively that the merchandise was not delivered to him by the last carrier, under which circumstances the last carrier is liable.

When you signed the receipt admitting delivery of all merchandise you automatically assumed responsibility. However, if you can prove that the other warehouseman did not deliver the chair to you, then you can hold him responsible for the loss.

When signing a receipt without checking out goods listed thereon, you should rubber stamp on the list "Load received, but articles not checked sepa-

ately." Then, when you arrive at your warehouse, properly check the goods, with witnesses, and immediately notify the last carrier or warehouseman that certain articles are missing. Also, have the customer sign a receipt that he will look to other party for missing articles.

Truck Route of a Competitor

LEGAL EDITOR, Distribution and Warehousing: Some time ago a competitor received a certificate extending his route into our territory. Can we sue and have his certificate cancelled? If so what is the procedure?—*Blockburg Transfer.*

Answer: In a recent case (193 N. E. 407) a higher Court held that a transfer company which delayed about two years in making a similar complaint had delayed too long a period, and the Court refused to invalidate the extension of the route. If your delay has not been for so long a period you may file complaint with the Public Service Commission and request reconsideration and cancellation of your competitor's certificate. But you should obtain services of a competent local lawyer, and you should make a complete list of logical reasons why the certificate should be invalidated. You should, also, introduce testimony proving that you were serving the customers in the extended territory in a satisfactory manner.

Cleveland Van Driver Strike Ends; Wages Are Increased; Warehouse Rates Are Raised

CLEVELAND'S household goods van laborers' strike ended on March 26, after having prevailed since Feb. 28. The men received increased wages, now said to be the highest paid anywhere in the country for that class of labor; and the warehouse operators increased their rates to the public. The industry in the Ohio city is approximately 95 per cent union-organized.

The Van Drivers & Furniture Handlers Union, Local 292, receded from its original demands and the agreement as finally reached with the Cleveland Furniture Warehousemen's Association and the Cleveland Van Operators' Association called for 75 cents an hour (as compared with 60 cents previously) and 80 cents (as against 75 cents previously). A conciliation commissioner, A. L. Faulkner of the United States Department of Labor, had suggested 72½ and 77½ cents as a compromise but this was rejected by the union leaders.

After the agreement had been signed the Cleveland F. W. A. raised rates from \$4 an hour to \$4.75; and the van operators from \$3.50 an hour to \$4.25. O. L. Scott, president of Scott Storage, Inc., and chairman of the employers' committee, was quoted in a Cleveland newspaper as saying:

"If the settlement had been on the basis of what we thought it should have been, there would not have been a raise

in rates. We had to raise rates. There was no other choice. Our operating expenses are up 33 1/3 per cent, considering all of the overtime rate we will have to pay."

Under the agreement, labor must be paid time-and-a-quarter for the first two hours over the eight-hour day, and time-and-a-half for all time over that, providing the working day is between 6 A. M. and 7 P. M. If a workman goes on the job after 7 P. M. he must be paid

the over-time rates for all hours he is employed.

The van drivers' union has about 1,500 members in Greater Cleveland.

For nearly a month not a load of household goods moved into or out of storage in the city, and delivery of shipments in-coming from other points was blocked. It was estimated that 25,000 families were waiting to be moved at the time the strike ended, and for a week the vans were decidedly busy.

Drivers Strike in Two New England Cities

HARTFORD, CONN., and Springfield, Mass., truck drivers affiliated with the International Brotherhood of Teamsters, Chauffeurs and Helpers walked out on April 21 after negotiations for union recognition, slightly increased pay schedules and better working conditions had failed. The number of men on strike was variously estimated from 800 to 1,500.

In Hartford several drivers of trucks of the Hartford Despatch & Warehouse Co. were threatened, and in one instance a stone was thrown through a windshield, but deliveries were made with police protection.

The strike appeared to be aimed chiefly at about 40 motor freight haulers who are members of the Eastern Motor Freight Conference. Pickets were posted on main highways and succeeded in stopping many trucks.

Locals of the Brotherhood in New York and Massachusetts were solicited to refuse to handle trucks passing into those States. Union trucks from New York were permitted to pass through Connecticut because of New York contracts now in force with the union. Organizers stated there was no intention to interfere with local hauling.

In addition to union recognition, the drivers demanded an increase from 55 to 60 cents an hour for local drivers, and from 72 to 75 cents for over the road; time and one-half for holidays and Sundays and for all time worked above 48 hours a week; compensation for time spent at hold-over points; that extra help be paid on the same basis as regulars; that suburban and route men be classified as road drivers; and that schedules be arranged to let drivers spend week-ends and holidays at home.

What's New

Shop Equipment Accessories Trade Literature

If you desire further information regarding products listed below, or copies of literature mentioned, we will gladly secure same for you. Just check the number in coupon and mail it to
DISTRIBUTION & WAREHOUSING

- 1—"Ground-Grip" Tire. The new Firestone tire is claimed not to need chains to pull the truck out of mud and snow or where chains would leave the vehicle stranded. Rides smoothly and is satisfactory for highway travel. Will not clog with mud or clay.
- 2—Two-Speed Axle for Fords. This dual-ratio axle is claimed to make possible greater operating economy. A Ford truck so equipped, can also be operated in the regular Ford gear ratio as desired. Nothing is taken away from the present performance. By turning the dual ratio switch on the dash the regular ratio of 6.6 is changed to a "power saving" ratio of 4.4, thus reducing the engine speed 33 1/3 per cent. Made by Columbia Axle Co.
- 3—Wheel Balancing Lug. Designed for

- Jumbo and straight rim wheels. Weight is precise for accurate balancing. No screws, no clamps and no drilling. Requires no clearance and hooks simply over rim. Maker, Bear Mfg. Co.
- 4—Aircraft Valve for Trucks. A new heavy-duty valve of aircraft engine valve steel that comes with a Stellite seat and stem tip in some instances. For certain other engines the Stellite is omitted. The steel used is exceptionally strong when hot and is highly resistant to burning and corrosion. Maker, the Thompson Products, Inc.
- 5—Purolator for Fords. By use of a small casting, supplied by the Ford company, and quickly exchangeable for the regular Ford fuel pump adapter assembly, the installation of Purolators on the 1935 Ford is made possible without drilling

- or boring, with a minimum of mechanical effort, and in position which assures the greatest filtration efficiency without interference with operation of the crankcase ventilating system. Purolator is held in a bracket made fast to two cylinder head studs. The oil, as formerly, is taken from the crankcase and drilling is avoided, by replacing one of the plugs back of the left bank of cylinders with a hollow 1/4-in. pipe plug.
- 6—Quick-Dry Finishes. A new automobile finish, known as Opex OK, especially suitable for refinishing or spot painting to quick drying. It possesses exceptional build and the enamel dries to a smooth, high, natural gloss without sanding, polishing or rubbing. Developed by Sherwin-Williams Co.

Keep Posted on Trade Literature

- 7—Aluminum, a Weight Saver. For the truck owner who wishes to save money through weight reduction of the chassis itself, the body, and even in refrigeration insulation, this 65-page book is packed with information and illustrations of worthwhile character. For example, it shows how over 1 ton was saved in an all-aluminum truck chassis, over 1500 lbs. on a body with larger capacity, etc. Aluminum foil as an insulation is also shown to have economies in weight reduction and in thermal conductivity. Published by Aluminum Co. of America.
- 8—"What is a Diesel." In 24 pages, the maker of the Waukesha Diesel engine for motor trucks answers practically every question concerning this type of power-plant to give a clear and concise explanation of just how it operates, what it accomplishes in the way of reducing operating costs and improved performance, etc. This catechism of the Diesel engine is well illustrated so as to explain in ABC form the constructional features, etc.
- 9—Converting Fords to 10-Tonners. Warford has compiled a very well illustrated book showing what various Ford and other small truck owners have done to increase their tonnage capacities to 7 1/2 or 10 tons. This has been accomplished through the installation of a multi-wheel drive and a heavy-duty transmission.

- Eight wheels have traction and braking is on ten wheels.
- 10—Dividends to All. An interview with Col. C. O. Sherrill, vice-president of the Kroger Grocery and Baking Co., Cincinnati, in which he presents some thought-provoking comments on the relation of the motor truck to the general public. The well-known question, "Who Pays for Highways?" is very satisfactorily answered in this 22-page interview. Leslie C. Allman, director of public relations of the Fruehauf Trailer Co., is the interviewer.
- 11—Truck Tire Calculator. Helps truck owners to choose the correct type of tires for 1 1/2-ton trucks on different wheel-bases. Simple to operate and will help reduce operating costs by noting the correct size of tires to use for given loads. Given free by the B. F. Goodrich Co.
- 12—Tire Maintenance Manual. Tells how to secure the most mileage from your truck tires. Given free by the General Tire & Rubber Co.
- 13—Manual of Painting Systems. A complete detailed discussion with illustration showing all of the painting application methods for trucks and cars. Given by Rinsheed-Mason Co.

- 14—Steaming of Fabrics, Carpets, Etc. A series of interesting pamphlets dealing with the question of treating or steaming out wrinkles, crushes, creases, press and rub marks, also certain water marks from mohair plushes, velours, carpets, dresses, etc. The Steamax treatment will brighten up any fabric and is widely used in the warehousing and furniture storage field. Published by the Steamax Co.
- 15—Engine Tune-Up Manual. Shows owners of trucks with Carter equipped carburetors how to make tune-ups fast, easy and accurate. A series of complete charts for all models of every Carter-equipped car and truck is supplied. Given by Carter Carburetor Corp.
- 16—Demountable Bodies. A detailed presentation in 24 pages on all questions concerning the economics of demountable body equipment, by Roloff, Inc.
- 17—"Cutting Distribution Costs with Motor Trucks" represents a valuable collection of facts to guide warehousemen and motor freight operators in selecting the most economical types and sizes of hauling equipment. Published by General Motors Truck Co.

- 18—Wheel Handbook. Besides serving as a catalog of wheels, hubs and parts, this book includes diagrams identifying different types of rims and lists the Tire & Rim Assn. dual spacing, giving information about change-overs, and facts about wheels for Chevrolet and Ford trucks. Published by Budd Wheel Co.
- 19—Radiator Replacement Guide. A very handy book to have around as it is packed with information that every truck owner should know. Complete specifications, prices, etc., are given for practically every car, truck and tractor. Regardless of what age the vehicle is, this guide can tell you what to and where to order radiator core replacements. You may not know it, but you can save about 50 per cent on factory prices by buying from the McCord jobbers. The guide lists these jobbers. Anyone can install cores on trucks of 2 tons and over capacity. Smaller cores require the services of an experienced radiator man. This guide is free and is published by the McCord Radiator & Mfg. Co.

Distribution & Warehousing,
249 W. 39th Street,
N. Y. City.

Please have forwarded to us without obligation complete information covering products or literature checked below:

- | | | | | | | | | | |
|---|---|---|---|----|----|----|----|----|----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | |

Signed Company

Street

City State



Washington Developments of Interest to the Warehousing Industry

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

Dismissal of Chicago Switching Tariff Case Asked by Belt Railway

THE Illinois Belt Railway has filed a petition with the Interstate Commerce Commission to dismiss, without a hearing, the complaint of the Illinois Association of Merchandise Warehousemen charging discrimination in switching rates favoring the Crooks Terminal Warehouses, Inc., Chicago.

As basis for its motion the Belt Railway contends that issues involved in this case are identical with those presented in the pending case, before the I. C. C. of *Anchor Storage Company of Chicago v. the Alton Railway*, "and that the complaint is a deliberate attempt on the part of the complainants to have such issues reheard in a new hearing without observing the requirements of the rules of practice as to the obtaining of a further hearing in a case now pending. The Commission should not put the defendant to the trouble and the expense of an additional hearing until it is convinced upon appropriate representations that the record heretofore made in the pending case is inadequate and incomplete."

One Admission

Belt Railway concedes there is one difference in the two cases—concerning the allegation that sugar arriving in Chicago by water is transported by the Belt Railway to the Crooks warehouses and then reshipped by rail for a charge of one cent per 100 pounds paid by the Crooks firm to the Belt Railway, which, the Commission has been told, "constitutes a device for the allowance of unlawful concessions to shippers" in alleged violation of the Interstate Commerce Act and the Elkins Act. Inasmuch as the alleged violations concern criminal actions with consequent set penalties through the offices of Federal courts, the alleged violations are not within the jurisdiction of the Commission, the Belt Railway argues. The

I. C. C. could decide the legality of such actions without the necessity of a further hearing, it is contended.

In charging the complainants with a deliberate attempt to bring a similar case to the attention of the Commission while the Anchor-Alton dispute is pending, the Belt Railway charges that D. M. Macomber, Chicago, president of the Illinois Association of Merchandise Warehousemen, assured the association members on April 9, 1935, "that if they would lend their names to the bringing of this complaint it would be prosecuted by and the expenses shared by the seven companies" which are complainants in the Anchor-Alton case.

—Edwin Hartrich.

I.C.C. Denies Petition of North River Stores in Rail-Warehouse Case

THE Interstate Commerce Commission has denied the petition of North River Stores, Inc., New York City, to grant reconsideration of that part of Ex Parte No. 104, Part 6, which concerns itself with alleged operation of inland stations by the Erie Railroad. Part 6 covers the investigation of warehousing and storage of property by carriers in the Port of New York.

The petitioner complained of alleged discriminatory practices and questioned the legality of Erie operating inland stations. The operations were branded as "flagrantly against public interest," and the allegation was made that competent evidence had demonstrated that the railroad was employing a subterfuge in the operation of Independent Warehouses, Inc., situated off-track, by paying for cartage from the rails to those warehouses. It was further shown, the petitioner contends, that Independent Warehouses, Inc., was actually a part of the Erie organization, thus giving the railroad a special operating advantage denied other warehouses and shippers.

The railroad successfully contested these claims in the original hearings.

—James J. Butler.

Hickey Is Handling Claims for Recovery of Taxes on Energy

THE warehousing industry is not subject to the electrical energy tax imposed by the Revenue Act of 1932 because electricity consumed by warehouses is used for commercial and not industrial purposes, leaders of the fight against the Internal Revenue ruling declare.

Judge John J. Hickey, counsel for the Warehousemen's Protective Committee, is in charge of the settlement of claims for the members of the industry on a contingent basis. Mr. Hickey declares that warehousing does not come under the taxing provisions of the 1932 law with regard to the electrical energy tax, because the industry is a commercial user of electricity. He is waiting for the members of the industry to file their claims through him for taxes paid during period of application of the tax—June of 1932 to August of 1933. The total amount of claims against the Government probably amounts to \$12,000 to \$15,000, he states.

Should the Commission of Internal Revenue rule against the claims, Mr. Hickey plans to take a test case to the United States Court of Claims.

—Edwin Hartrich.

Truckmen Ask Congress to End "Less - than - Cost" Cartage by Erie and Pennsylvania RR's

THE hackneyed phrase "to meet motor competition", employed by railroads to justify rate revisions, has been turned about by Merchant Truckmen's Bureau of New York in a protest against less-than-cost cartage furnished by the Pennsylvania and Erie Railroads.

The protest, addressed to the Senate and the House of Representatives and to the Interstate Commerce Commission, concludes with this paragraph: "The salvation of these local truckmen depends upon their ability to extend the scope of their operations in competition with the railroads and any legislation

designed to limit such competition forecloses them against this right of self-preservation."

The statement, signed by President Hugh E. Sheridan, complains:

"The rates specified are less than one-half of the actual cost of doing the work and they are about one-half what the railroad actually pays its own truckmen to do the work. In addition to this, the railroad pays for the labor of loading the freight upon the truck of its truckmen, which service the railroad does not render to any other truckman.

"Thus, these railroads compete with local truckmen for this work by using their Notice of Arrival to advise the customers of local truckmen that they will do their work at 50 per cent of cost and on some shipments they make no charge for trucking.

"This work has always been done by local truckmen and there is not justification for this competition, because local truckmen are not competitive with railroads, but have worked with the railroads against the competing long distance trucks.

"Instead of reducing rates for their own rail service to meet the competition of parallel truck service, railroads offer to contribute all, or part, of the cost of local trucking if this trucking is done by them.

"This service is offered by these railroads as an 'improved method', but it must be recognized that the physical trucking operation is the same whether it is done in a railroad 'store-door' service or by a local truckman; i.e., the freight is inloaded from a railroad car at the railroad terminal where it is reloaded upon a truck and conveyed to the address of consignee. At even cost, the service of the local truckman, or the use of merchant-owned trucks, may be preferred due to consignee's control of the time of delivery to suit 'shipping room' or 'warehouse' convenience; also because the work might be performed by trucks used in other local service which, in any event, would have to be maintained.

"The publicized popularity of this railroad 'store-door' service, in which the railroads have dissipated hundreds of thousands of dollars, is due to the fact that local trucking is offered free or at less than cost. Thousands of shipments listed by railroads as 'store-door' did move and would have continued to move over the same railroads without this trucking concession. Examples of this are the shipments illustrated herewith. Both were shipped over these railroads without 'store-door' routing, but the railroads gratuitously urged the consignees to accept the contribution of half their trucking cost.

"Violating every principle of fair competition, these railroads seek to create a monopoly of this work by driving out of business the thousands of local truckmen who exist in practically every community in the country.

"We have appealed, without avail, to every known constituted agency for relief from this grave injustice, which is

aggravated by the fact that the very money contributed in taxes by these truckmen is loaned to the railroads bent on their destruction. Therefore, the salvation of these local truckmen depends upon their ability to extend the scope of their operations in competition with the railroads and any legislation designed to limit such competition forecloses them against this right of self-preservation."

—H. M. Manning.

Hickey Marking Time in Lighterage Situation

PENDING possible changes in the organization of the Interstate Commerce Commission as contemplated in the Eastman report now translated into proposed laws, Judge John J. Hickey does not intend to press for reconsideration of the Jersey lighterage decision.

If enacted as drawn, the Eastman bills will increase the size of the Commission, carving that body into units, each of which would be charged with immediate supervision over separate arms of the national transportation system. Until this is accomplished, assuming that it is to be done at all, efforts for reconsideration might prove to be lost motion.

The objective sought is free lighterage on export, import, coastwise and intercoastal freight for the navigable waters of New Jersey, demanded by Newark interests and supported by the New York Port Authority.

Should it be necessary to go into the Federal Courts to argue the revision proposal, the problem probably will be carried to a special statutory Court of three judges, functioning as an appellate tribunal for the Newark area. Appeal, if one is necessary, would be direct to the Supreme Court of the United States, hastening a final adjudication.

—James J. Butler.

Grand Trunk's Lower Rates on Automobiles Protested

THE Automobile Transporters of Michigan, Inc., has petitioned the Interstate Commerce Commission to investigate and suspend the schedule of tariffs of the Grand Trunk Railway system. The schedule, effective April 15, would reduce transportation costs of automobiles from Michigan points to Chicago below rates of truck operators.

The petitioners represent eighteen Detroit trucking companies which haul 90 per cent of the auto and auto chassis between points mentioned. The established minimum rate for such transportation has been \$18.50 per car, while the proposed rail rate would be less than \$15.

The petitioners charge, in their brief filed, that competition would reduce trucking rates below costs, in violation of the trucking Code; that the railroads have enjoyed numerous reductions without compensating increases in traffic since 1930; and that the new rates are

discriminatory, lower than necessary to meet existing competition, and unlawful.

Meanwhile the commission has authorized the Railway Express Agency and the Southeastern Express Company to extend to May 1, 1936, the truck competitive rates which apply to less-than-carload rates on an express freight. The rates were due to expire on May 1, 1935, but the companies asked for an extension to meet over-the-road truck competition. The express companies claimed that the rates allowed them to recapture traffic and large tonnage of merchandise south of the Ohio and Potomac rivers, and east of the Mississippi river. They said that it was necessary for an extension of the present rates until the charges and practices of interstate motor carriers were in a "more stabilized condition."

—Edwin Hartrich.

Lower Flat Car Rates Are Sought by Great Western

THE Chicago, Great Western Railroad has asked the Interstate Commerce Commission for reduced rates and new rules on transportation of all kinds of freight on flat cars between Chicago and Dubuque, Iowa. Under the railroad's request equipment must be furnished by shipper or his agent and charges are \$22.50 per loaded unit each way, and \$11.25 for each empty unit returned.

This new schedule may become effective May 6 with Commission approval.

—Edwin Hartrich.

New 30-Hour Week Bill in Congress

A NEW 30-hour week bill introduced in Congress by Representative William P. Connery (Dem.) of Massachusetts will, if passed, amend all NRA codes.

The first 30-hour week measure, offered on the opening day of Congress, has not yet been acted upon by the House Committee on Labor, to which it was referred.

The new bill provides that no article or commodity shall be shipped in interstate or foreign commerce if produced in any establishment where employees, other than executives, work more than thirty hours a week; whereas the first measure simply prohibited employees from working more than five hours a day, six days a week.

—H. M. M.

Security Is Host

The Security Storage Company, Washington, D. C., closely affiliated with the American Security & Trust Co., gave a luncheon to the members of the American's advisory board on April 6 in the Security's warehouse at 1140 Fifteenth Street, where the bank's northwest branch is located. The luncheon was preceded by an inspection trip through Security's storage properties. C. A. Aspinwall, Security's president, and the other officers received the guests.

Embodying the

Streamline Principle in the Motor Van

By ROBERT M. FERGUSON, JR.

without losing sight
of practicability

THE horse-drawn vehicle is something of the past. The ugly motorized box is fast disappearing and we are witnessing great improvement in land transportation vehicles. It is the emergence of land transportation from its wind-pushing epoch into a new era of low wind resistances, higher speeds with less effort, reduced fuel consumption, and lighter weight construction.

The past twenty years has seen many improvements in land transportation, but these improvements have all brought their troubles. The motor vehicles of today are much more powerful and capable of much higher speeds, and this has been accomplished chiefly by using larger motors, but has resulted in greater fuel consumption aside from increasing the weight of construction.

Engineers realized that to follow this method eventually would mean motors of enormous size and so turned to the aeronautical engineers, who had blazed the streamline trail, for assistance.

The big motorized birds of today have clearly proven the merits of streamlining, or construction along aerodynamic principles, indicating that this was the solution. Streamline construction, it was quickly discovered, materially reduced the power necessary to propel a vehicle, the power saved being used to increase speed, as well as resulting in a substantial reduction in weight.

The public has been accustomed to thinking of an airplane as a frail contraption, liable to break apart at any time, but such an idea is erroneous, as airplane structure is the strongest structure known. It is a known

fact that no building, bridge or vehicle will stand a burden of ten times its own weight, as an airplane's wings must do in order to pass the government test.

In the progress of railroads, aviation and the other common carriers the public had no set ideas on appearance, and as a result common carriers were quick to grasp the possibilities of streamlining. Consequently, today we have streamlined trains, buses and trolley cars, and we are told to expect drastic streamlining of the superstructure of ocean liners now under construction. New streamlined tank trucks have appeared recently, to say nothing of the improvements and changes in the pleasure car field in the last three years.

Pleasure car manufacturers have been hesitant about making too rapid a change because of the public's refusal to accept a new idea so strikingly different from the appearance of the conventional car. People become accustomed to the appearance of something and refuse to accept a drastic change overnight. We laughed to ourselves at the first sight of a new streamlined automobile. Didn't we? It looked like a "wild varmint" coming down the street—and as appearance is a big factor in sales of pleasure cars, the manufacturers have had to make the change in appearance gradually. They were treading soft ground and had to go cautiously.

Streamlining has not progressed very far, but now that the public is getting accustomed to it, and realizes that it means more than just a change of body style, we can look forward to greater changes and improvements throughout the entire construction of vehicles.

THE streamlined cars of today are far from being fully streamlined. They are what would be said to be semi-streamlined. A fully streamlined vehicle would embody the use of a rounded front or bullet-like nose, and smooth flowing lines with a smooth skin or outer surface, devoid of protuberances and tapering at the rear, to disturb the air as little as possible, thus eliminating vacuum. This shape of vehicle resembles a teardrop, and naturally provides space for placing the propelling machinery in the rear.

Motor car manufacturers have been working for some time on suitable transmissions which will permit the transfer of the motor into the rear section, and thus permit the full use of streamline

principles. The public will have a fully streamlined pleasure vehicle sooner than is expected, providing of course the pub-

MR. FERGUSON'S drawings for a streamline motor van adaptable for household goods moving were developed at the suggestion of members of the New Jersey Furniture Warehousemen's Association, and are now being studied by several leading body builders and truck and trailer manufacturers.

The author of the plans and of the accompanying article is the son of Robert M. Ferguson, Jr., New York specialist in warehousing insurance.

lic is willing to accept the change and the manufacturers do not lose their nerve.

Motor vans of the present day greatly resemble motor vans of a few years ago. We still have a box fitted onto a chassis, the ugly under-structure exposed, still fighting the wind, creating air backwash or vacuum, and as a result using more power and fuel than should be necessary.

Some of the more recent vans constructed have deluxe body construction, usually mounted on what is called a bus chassis, but these vans are by no means streamlined. Gradually, as deluxe bodies have appeared, the roof corners and end corners have been rounded, windshields have been slanted, aprons or body skirts have been attached, and some operators

have gone so far as to cover or build a radiator shell out to take up the air pocket at the front, and to slant the rear of the body.

These improvements have all helped, but only to a small degree—yet this is evidence that some van operators are becoming more and more air-minded, or streamline conscious.

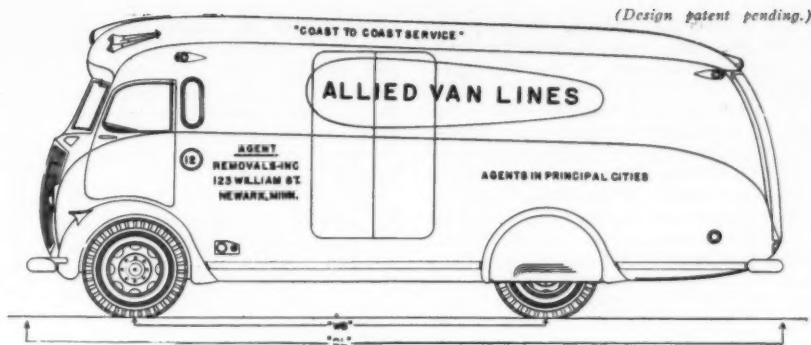
Style and construction of van bodies are destined to change as have the other forms of land transportation vehicles. Van operators realize that the old type van is doomed—it has been disappearing for some time. The present day deluxe van will go their way, too; and in their place will be beautiful motor vans, fully streamlined, traveling at high speed with less effort and on lower fuel consumption.

Changes in style and construction of commercial vehicles are dependent on the acceptance of streamline principles by owners and operators who purchase vehicles to earn a profit for them—not like the pleasure car, which is dependent on a public who purchase for pleasure purposes and not, through the use of the vehicle, to derive a profit.

Van operators necessarily have to discard their old ideals of how a van should appear, and in the construction of future equipment turn their ideas towards streamlining—profiting by the experience of the other forms of transportation already many steps ahead.

Commercial motor vehicles have not advanced as rapidly as the other vehicles of transportation because the chassis manufacturer in most cases does not build the complete unit. Pleasure cars today would be many years behind in style, speed, etc., too, were it not for the fact that the chassis manufacturer builds the body and all appointments as well. The pleasure car is a complete unit.

In acquiring a new van the common procedure is to purchase a suitable chassis from one of the manufacturers and then to this chassis have a body built suitable to the work for which the unit is intended. Each operator has his own particular body builder, who, in most cases, is accustomed to building a particular style of body. Van operators give little thought to the building of the



As drawn to scale by Mr. Ferguson. Chassis: wheelbase 180 in.; overall width 96 in.; overall length 27 ft. 6 in.; overall height 11 ft. 3 in. Body: average length 19 ft. 6 in.; average height 7 ft. 3 in.; width 93 in.; approximate cubic capacity 1,230 ft. Use of "Allied Van Lines" as inscribed on van's side is of course theoretical.

van body, usually only supplying the size of body wanted and permitting the body builder to use his own judgment from there on. The result is the same style of body with some improvements, or a body similar to one in operation by some other firm or operator.

The response to streamline principles in motor vans must come from the owners and operators. Body builders will build any type of body desired, but it rests with the operators of vans to start the ball rolling. If an operator desires something different from the usual type of body, the idea and change must come from the operator; otherwise, unless some impetus is given, we will continue to have heavy wind-pushing vans, continuing to use more fuel than is necessary to propel the vehicle.

A manufacturer in constructing a chassis takes into consideration all types of hauling and uses to which the chassis may be subject, i. e., weight of load, type of commodity, etc.; consequently chassis are suitable to any type of work within the weight capacity of the chassis. Chassis being suitable to general use, the cab, fenders, hood and other parts supplied are accordingly suitable to general use, it being anticipated that a body will be built from the rear of the cowl,

or in the case of a box body the cab will be used.

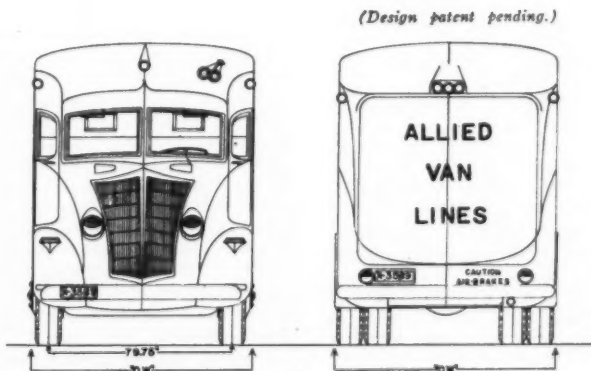
Motor van operators contemplating acquisition of new equipment are fortunate in having, on the market today, cab-over-engine or traffic type truck chassis, offering shorter wheel base, greater maneuverability, one-third front and two-thirds rear axle distribution of weight, etc., within the price range of conventional type chassis.

The traffic type chassis with its condensed front-end design is readily adaptable to streamline principles, this type of chassis permitting the use of a rounded front or bullet-like nose, which, if properly designed, will reduce wind resistance to a minimum, thus assisting the vehicle in boring its way through the air, rather than setting up air resistances which retard the vehicle and necessitating the use of more power, as is the case with the conventional type of chassis. Use of the cab, hood, fenders, etc., supplied with a conventional type chassis—i. e., building the body back of the cowl—will not permit proper streamlining of the nose of the van. Air resistance will still be prevalent and the streamlining of the body itself from the cowl back will have little effect.

The design or shape of the rear is also very important and cannot be overlooked, as vacuum or air backwash is one of the worst factors causing retardation of a vehicle. The rear section must be designed so as to disturb the air passing over and around the vehicle as little as possible, laying the air back smoothly and affording no opportunity to eddies and vacuum.

The shape of the front, rear, top and sides must be designed to permit the vehicle to slip through the air, offering the minimum of resistance.

In purchasing a pleasure car the prospective buyer first looks to cost and then to the chassis and style of body. The prospective van operator reverses this, looking to chassis construction first, whether the chassis will perform and carry the weight properly, and then a body suitable to the type of work and to the commodity carried is built. The van



Front and rear views as drawn to scale by Mr. Ferguson. Overall width, 79.75 in.

operator does not and can not purchase a complete unit; consequently the style of body is dependent on the van operator.

In designing a streamline van, after questioning many operators, and taking into consideration the traffic problems of today, realizing that the operator is more interested in carrying capacity, rather than fuel consumption, reduction of wind resistance, etc., the traffic type chassis offers the best possibilities from

all angles in the construction of a van that will embody streamline principles and yet have all the advantages and practicability of conventional types plus the desirable features of shorter wheel base, greater maneuverability, and one-third-two-thirds axle distribution of weight.

The traffic type chassis offered today by various manufacturers are more or less in the heavy-duty class; but, as the demand is created, chassis of lighter

construction will undoubtedly be introduced. Streamlining is not limited, its principles being adaptable to all sizes of bodies, providing of course that symmetry of line is not overlooked.

The van pictured herein, I believe, embodies streamline principles as much as possible without losing sight of practicability, the cost of construction being close to the cost of bodies of the conventional type.

The van itself is mounted on a 3-5-ton traffic type chassis of 180-inch wheelbase.

The overall length of the unit is approximately 27 feet 6 inches. The overall height 11 feet 3 inches. The overall width of the body 94 inches.

In streamlining the body, in order to permit tapering of the body to the rear, the front of the body must be higher than the rear. In this case the height of the inside of the body at the front is approximately 8 feet, tapering to 6 feet 6 inches at the highest point at the rear.

These dimensions give an approximate cubic capacity of 1,230 cubic feet, which is much greater than any conventional type of van using a 180-inch wheelbase.

In the future—and unquestionably this is realized by all operators—rear-door loading of vans will be eliminated. Today many operators prefer side-door loading. This van has both side and rear doors, although either can be eliminated where desired.

A motor van is quite a large vehicle and naturally lends itself to great resistance from both sides as well as the front and rear. In order to reduce side resistance, the roof of the body has been curved or arched as much as is practical, and on study of the rear-view design it will be noticed that the body skirts are convex, curving inward below the rubbar. This feature, aside from eliminating resistance underneath as much as possible, avoids tearing the body on high curbs, etc.

The underneath portion of the van at the rear of the rear wheels has been enclosed to reduce resistance; and, besides, provides a compartment for carrying spare wheels. Accessibility to the compartment is provided through a door opening downward on hinges.

Costs

Reputable body builders, accustomed to building bus and similar bodies, which necessarily involve metal work, estimate the cost of building this body, complete, would be approximately \$2,000; not to exceed \$2,300-2,400.

This cost would include headlights moulded into the body; special radiator grille and fenders; bumpers; rub-bars; lights; and other necessary trim. The frame work of the body would be of ash or oak, covered with 20 gauge auto body steel. It is possible to follow the shape very closely, producing a body exactly like the design.

A motor van on a traffic type chassis incorporating streamline principles would be practical, smarter looking and cleaner. Being capable of higher speed and hav-

Four Wheel Drive Offers New 1½-Ton Speed Truck



THE Four Wheel Drive Auto Co., Clintonville, Wis., has developed a new 1½-ton speed truck, Model HS. Specifications call for road speed of 47 m.p.h. with full load.

This unit is propelled by an 84 hp. engine which develops 185 foot-pounds torque. The fundamental principle of applying power equally to all four wheels is retained. Ease of steering and simple handling are increased by setting front axle 42½ inches from front bumper. This setback principle assures also equal distribution of load.

Avoiding the stigma of being a converted passenger car, HS is built for heavy duty as well as fast travelling. The 6.50-20 tires are dual in the rear.

Net mechanical rating is 88.2 per cent—a rating based on the official findings of Purdue University. The manufacturers claim it is made a safer truck to drive because powered front wheels, plus a greater part of the load being on front axle, prevent danger on curves and slippery pavement. Safety, it is further claimed, is increased by the fact that the load is pulled as well as pushed, through the four-wheel-drive factor, thus giving equal distribution of tire traction.

Unlike other FWD models, made for heaviest trucking, road-building, logging and similar performances, the HS is built for the general market. Retailing at \$2,400, it is the lowest-priced Clintonville FWD truck yet offered.

Accompanying illustration shows an HS hauling a trailer. Length of frame and wheelbase are optional so that various sizes of trailers and bodies can be used and always conform to the States' highway laws.

The Truck is convertible from an all-

four-wheel drive to a front-wheel drive or rear-wheel drive in cases of emergency. It bids for the medium light-weight class. Chassis weighs 5,220 pounds including cab. Gross weight is 11,200 pounds. Wheelbase, and body space back of the cab, are variable according to needs of purchaser. With a 132 inch wheelbase, 120 inches of clear space for load is available behind cab; a 121-inch wheelbase gives 96 inches of body space; and a 142-inch wheelbase allows 144 inches for load use.

Powerplant consists of an FWD 6-cylinder BK type engine. Horsepower rates 84 brake horsepower and torque 185 foot-pounds. Patented built-in governor is adjustable, sealed, self-lubricating, and non-hunting. A seven-bearing crankshaft, battery ignition, wire-mesh type of air-cleaner and mechanical fuel feed are other features.

The engine has been provided a forced water circulation by means of a centrifugal pump through a fin-and-tube radiator, and with a full-pressure system for oil distribution, equipped with a series type of oil filter.

Power from engine is transmitted to the 4-speeds-ahead gearset through a 12-inch plate clutch, and from the transmission main shaft level the power is transferred to the center differential, where it is divided and distributed to each axle. Compensation for the difference in distance traveled by the front and rear axles is solved by a conventional bevel-gear type of center differential. The center differential lock, patented by FWD, operates from driver's seat.

Complete control is maintained through 4-wheel hydraulic brakes operated by vacuum booster.

ing a shorter wheelbase, and with the resulting maneuverability, it would not get in the way of the motorists on the roads. That it would be a medium of good advertising at any cost, is quite obvious.

A National Safety Campaign Is Inaugurated by A. T. A.; Arnold on Rules Committee

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

IN an effort to promote safety on the highway the executive committee of American Trucking Associations, Inc., has approved a national safety campaign, coupled with a series of national awards to firms and drivers participating.

A sub-committee appointed to draft rules and regulations of the contest includes one storage executive—P. F. Arnold, president of the Cole Teaming Warehouse Co., Providence, R. I.

Through the existing trucking associations, safety organizations will be formed in the 48 States and District of Columbia. The safety groups will be asked to have 20 or 30 members in each area "sell" the idea of truck highway safety. Other civic organizations, as local chambers of commerce, will be asked to cooperate. Also individual operators and drivers will be asked to

participate for the contest awards of the national association's safety drive.

The sub-committee appointed has been voted necessary funds to work out the program in cooperation with the A. T. A. staff, the National Safety Council and other groups.

A report presented by Dr. J. C. Nelson, secretary of the A. T. A. Insurance Committee, pointed out the strides made in safety drives in the various States since the Chicago convention, and urged that such campaigns be carried through on a national scale.

Ted V. Rodgers, A. T. A. president, commenting, stated: "Few problems confronting the industry today are more important than that of safety."

—Edwin Hartrick.

Some Figures on Kansas Port of Entry Statute

BUSINESS WEEK gives the following statistics on the Kansas port of entry law:

Based upon inbound and trans-state truck movements in May and considering outbound truck movements in December (thus obtaining an all year average) 53,000 trucks loaded with 164,000 tons moved into and out of the State during these representative months. On the rails this totals about 4,000 carloadings. Trucks averaged 175 miles per truck trip, of which 104 were on Kansas roads.

Each truck had a net payload of 3 tons, running up a total of 34 million ton miles.

During the year 1934 the 65 'ports' of Kansas cleared over 597,000 trucks (some refrigerated trucks regularly moving from points as far away as California, Massachusetts and Florida).

Moving vans made up a large share of the tonnage with an average haul of 250 miles.

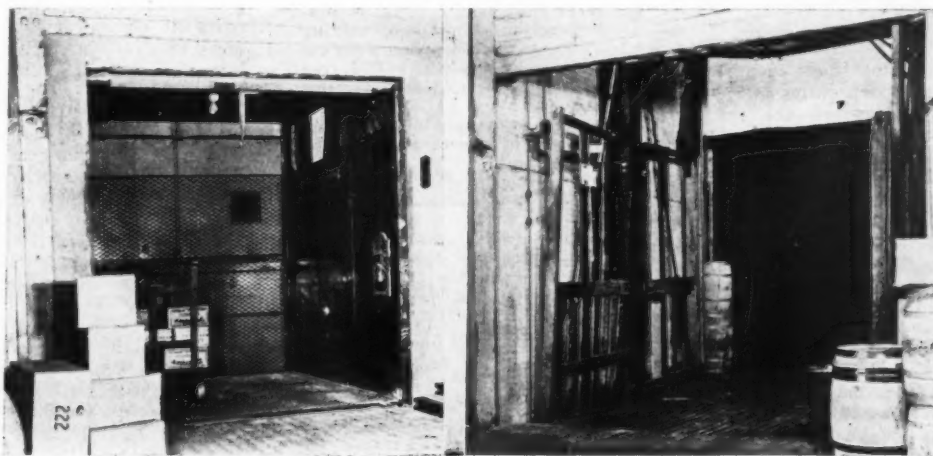
Agricultural products comprised about 35% of the tonnage, mineral products (gas, oil and salt) 26%, general merchandise 20%, miscellaneous 19%.

Columbia Has Reduced Truck Accidents 85% Since 1926

The Columbia Terminals Company, operating more than 600 trucks in the St. Louis area, established in 1934 a new record in its safety drive extending back across nine years. There were 64 accidents, 50 involving property damage and 14 personal injuries, in 1934, as compared with 818 accidents in 1926—a reduction of 85 per cent. Improvement has been steady since the safety drive campaign was inaugurated.

The company offers a bonus of \$25 to every driver who works one year without an accident. In 1934 the organization paid \$4,425 to 177 drivers on this basis.

Elevator Modernization Reduces Liability and Fire Insurance Rates



Left, elevator after having been thoroughly modernized. Right, the elevator as it was.

WHEN the Terminal Warehouse Company, at 27th Street and Eleventh Avenue, New York City, recently closed a twenty-year lease, involving 270,000 sq. ft. of floor space in six buildings seven stories high, good elevator service was a vital part of the negotiations, so Frank J. Malone, Terminal's vice-president, engaged the Otis Elevator Company to study the elevator equipment then existing and modernize it to today's standards.

Five elevators have been modernized.

The selected equipment includes new steel cars with steel plate flooring and a wire mesh gate at the rear; new car-frame and safety device; new guide strips; and new worm and gear.

Fire Doors

Counter-balance fire doors were installed for each hoist-way entrance. The operation was changed from the old-fashioned hand-rope type to modern car switch operation. Mechanical brakes were replaced by modern electro-mag-

netic brakes, spring-operated and electrically released. The resistance on controllers were replaced by slate panel controllers.

In addition to the foregoing, two completely new elevators were installed.

The total cost of the elevator changes was approximately \$35,000.

As a result of this modernization work the elevators give thoroughly safe and efficient service. The liability rate and the fire insurance rate have both been decreased.

Foreign-Trade Zone Rules Expected to Be Announced Soon by Government

By JESSE S. COTTRELL

DISTRIBUTION AND WAREHOUSING'S
WASHINGTON BUREAU,
1157 National Press Building.

IN order that the establishment of foreign-trade zones may be an aid to carrying out the machinery of the reciprocal trade agreements which are being negotiated by the Secretary of State with the major countries, the Foreign-Trade Zones Board, headed by Daniel C. Roper, Secretary of Commerce, was expected early in April to announce shortly the rules and regulations for operation of such zones. Other members of the Board are Treasury Secretary Henry Morgenthau, Jr., and Secretary of War George H. Dern.

The actual work of formulating a plan for operation of the zones has been entrusted to an Interdepartmental Foreign Trade Zone committee named last September soon after President Roosevelt signed the Trade Zone bill. This committee includes Claudius T. Murchison, director of Foreign and Domestic Commerce; Brig. Gen. George B. Pillsbury, assistant chief of the Board of Army Engineers; and Eli Frank, Jr., chief counsel of the Customs Bureau.

The inter-committee has spent at least five months in preparation of rules and regulations to govern the trade zones contemplated. Before beginning actual work, American consular officers and agents of the Department of Commerce abroad, in ports at which trade areas are located, forwarded to the inter-committee all data obtainable as well as zones' plans, rules and regulations. Taking these as a basis, the committee has sought to liberalize the rules and regulations under which those contemplated in the United States will be conducted, and at the same time to meet any objections which may have arisen among warehousemen and others against such areas being established and operated in the United States.

While the committee feels that it has met all objections after sounding out public opinion, it has let it be known that once the rules and regulations are promulgated they are to be subject to revising to meet conditions that may arise.

Meanwhile the Department of Commerce appropriation bill, which has already passed Congress, carries an item of \$30,000 to carry on the work in the Department of Commerce of assisting cities and communities in establishment of zones. This becomes available July 1. However, a small fund exists to

further the work until then, and four experts in the Department of Commerce have been constantly working out the plans as contemplated in the law enacted by the last Congress.

A number of cities are already engaged in a study of the potentialities of foreign trade zones, and preliminary surveys have been made by local commercial bodies at Staten Island, at the Port of New York, Los Angeles, Mobile, and Charleston (S. C.).

The consensus prevails that the only zone that would be established immediately would be on Staten Island, where nineteen large piers are only in partial use. Backed by the Chamber of Commerce, it is planned to establish the first foreign trade zone in the United States there as soon as possible.

Backers of a project at Wilmington,

REPORTS reaching Distribution and Warehousing indicate that commercial storage executives generally are thinking and talking about the probability that foreign-trade zones, sometimes called free ports, will be established in this country.

In the accompanying text our Washington Bureau presents the current picture.

N. C., have dropped the idea for the present, on the theory that the initial sponsors of such a project always stand to lose money for a period, or at least until there is a heavy flow of ships into a port attracted by freight to be exported from a zone. For the foregoing reasons, Wilmington folk have decided to bide their time and see the zones tried out in other places before they take a chance.

The Department of Commerce finds that the true objective of foreign trade zones is little understood in this country, although adoption of the idea in America has been advocated for fifty years as the benefits received by other foreign-trade cities in Europe became generally known.

A foreign-trade zone is an isolated, enclosed political area under supervision of Federal officials, operated as a utility by a corporation in or near a port of entry to which goods may be brought from foreign countries, stored, mixed into a product, processed and subjected

generally to certain specified, manipulation operations.

If reshipped to foreign points, the goods may leave the restricted zone without payment of duties and without intervention of customs officials. The goods, of course, cannot leave the zone for consumption in the country in which the zone is located without payment of import duties thereon.

It is stated at the Department of Commerce that the policy of the Government has been favorable, for a number of years, to the kind of commerce the foreign-trade zone is designed to promote. This has been expressed in the bonded warehouse, the bonded manufacturing warehouse, and the drawback system, which were instituted to relieve re-export trade from the restrictions incident to the administration of the tariff and customs laws.

While free-zone ports were established in Europe as early as the Fifteenth Century, the first ones were abandoned as they did not meet requirements; it was not until establishment of the zone-ports at Genoa and Leghorn, in 1876 and 1883, respectively, that a firm footing was secured. Then came rapidly establishment of such areas at Trieste, Hamburg, Bremen, Stettin, Copenhagen, Danzig, Stockholm, Cadiz and Barcelona. The most important of these is Hamburg. The total number of foreign-trade zones is forty, the most remote one from a seaway being that at La Paz, Bolivia, which is a land-locked country. A number of persons have already made plans to establish one in Colon, Panama Canal Zone.

The Department of Commerce has made it plain that establishment of a foreign-trade zone as a rule will call for expenditure of millions of dollars for land, wharves, warehouses, railroad connections, and dredging so that large ships may come in.

Physical requirements for establishment of zones are many, such as adequate slips to accommodate vessels in foreign trade, wharves and docks, mooring facilities, transit sheds, warehouses, fuel facilities, light and power facilities, water and sewer mains, fire protection, living quarters and facilities for officers and employees to live within or as near to the zone as possible.

For example the free port of Stockholm, Sweden, has a total area of 126 acres and represents an investment of \$8,000,000; that of Copenhagen, Denmark, \$3,800,000; while only \$380,000 is invested in the Bilbao, Spain, trade zone.

Zone Bill Sponsored by Bush Terminal Defeated by New York Legislature

A bill intended to permit application to be made to the Federal authorities for establishing a foreign-trade zone along the Brooklyn waterfront was defeated, 82 to 38, by the New York State Assembly on April 16. About a fortnight earlier the measure had been passed by the State Senate.

The bill provided for incorporation of an organization titled the New York Foreign Trade Zone Corporation, which must first be chartered by an Act of the State Legislature before it can apply to the Federal Foreign-Trade Zone Board at Washington for a license.

The incorporators of the proposed New York Foreign Trade Zone Corporation are James C. Van Siclen and C. Walter Randall, Federal trustees for the Bush Terminal Company, and Slater C. Blackiston, a Bush vice-president. Use for the Bush Terminal on the Brooklyn waterfront is under consideration.

In the State Assembly at Albany on April 16 the measure (which had been introduced by a New York City Democrat) was attacked by a Republican group the spokesman for which charged that enactment of the bill would turn over to a private group "a lucrative monopoly." "If you pass this bill giving this privilege to a private group," he stated, "you will retard the development of a free trade public zone in New York indefinitely. This should be a public industry."

The bill is apparently dead as far as the present session of the Legislature is concerned, but it was said on authority that it would be brought up again.

Explaining the bill, in advance of the action taken by the Assembly, Mr. Van Siclen said:

"The applications of the State of New Jersey for several points in the Port of New York are pending. It is most likely the Federal Government will grant only one license in the beginning and for several years to come. Thereafter, if the mayor's application for Staten Island should not be deemed best adapted to use, it might mean that only New Jersey could secure the zone.

"For this reason we have applied for a charter to bring the location into New York. It is now under consideration to use Bush Terminal in Brooklyn, where every facility for operating such a zone already exists and is in operation, whereas an investment of \$7,500,000 would have to be made in the Staten Island site. Our application would supplement and not in any way conflict with the Mayor's plan."

According to Major R. W. Patterson, consultant for Bush Terminal, the main purpose of the zone is "to reduce consumers' costs in foreign markets on our products without lowering quality or performance of our products."

"Certain reductions can be arrived at," he said, "without lowering domestic wage scales, through coordination of ac-

tivities involved in ocean commerce, cargo handling, warehousing, processing, manipulation and other activities permitted under the act."

"The zone will develop American-flag shipping by building up the trans-shipment trade, with resulting increased volumes of cargoes to our lines, in connection with both export and import movements.

"The economies enjoyed through the operation of a foreign-trade zone will be felt in all parts of the United States and will stimulate foreign-trade activities and penetration of foreign markets."

Position Wanted

BY young man with ten years' experience in merchandise and furniture storage, estimating, etc.

Former manager of large eastern warehouse. Best of references.

Address Box C-579, care of *Distribution and Warehousing*, 249 West 39th Street, New York City.

Smoke from Fire in a New York Dock Co. Warehouse, Brooklyn, Moves via Subway to Manhattan

A FIRE in one of the New York Dock Company's Brooklyn waterfront warehouses on April 20 proved to be one of the most unique blazes in the city's history. Smoke and fumes entered the Interborough subway nearby and traveled several miles—through the East River tube and as far as Manhattan's Wall Street, where scores of persons were overcome and attended by ambulance surgeons and nurses from hospitals.

The warehouse is New York Dock's building No. 38, a five-story steel-shuttered structure on Furman Street. The fire started on a Saturday afternoon and was not officially declared out until 5 A. M. the following Tuesday.

Newspaper reports that the damage was in the millions of dollars were at least slightly exaggerated. According to D. L. Tilly, the company's president, the loss amounted to less than \$100,000. The building was insured and all the contents are believed to have been insured. Stocks of crude rubber were burned, and water damaged some other commodities.

The blaze was attributed to spontaneous combustion.

Economy in Refrigeration

Read the articles—written by authorities—beginning on Page 14.

Temporary Household Moving Tariffs Are Fixed in Wisconsin

TEMPORARY minimum rates for long distance and local hauling of used household goods, office furniture and equipment between and in Wisconsin points were ordered by the Wisconsin Public Service Commission, effective April 20.

They are temporary because the Commission has not completed the lengthy investigation necessary to get all the facts on trucker-costs, but minimum rates effective for all truckers are needed to supplant rates fixed in the trucking Code, which has been invalidated by the State Supreme court in a ruling holding the Wisconsin Recovery Act unconstitutional.

Under the Commission order the minimum local moving rates for cities of from 4000 to 15,000 population, exclusive of cities in Milwaukee County, are \$1.75 an hour for truck and driver and 65 cents for each man in addition to the driver; for cities of 15,000 to 100,000 population, \$2.25 for truck and driver and 75 cents an hour for each extra man; and for Milwaukee County, \$2.75 for truck and driver and \$1 for each extra man.

The Commission entered into its investigation in response to a petition by the Milwaukee Furniture Movers' Association.

Meanwhile the twenty industries formerly operating under State codes, including that covering the merchandise warehousing, household goods storage and the moving trades, are seeking to secure enactment of legislation recreating the Wisconsin Recovery Act along constitutional lines.

Bekins of Northwest Buys Spokane Plant

The Bekins Moving & Storage Co., operating warehouses in Seattle, Tacoma, Vancouver (Canada), Portland and Denver, has purchased the four-story concrete warehouse at S-151 Adams Street, Spokane, for a reported price of \$90,000. The building contains 71,000 square feet of floor space.

It is understood that the company plans to spend \$10,000 to remodel the structure to provide space for manufacturers and wholesale jobbers. Local cartage and pool car and lift van services will be features.

New Detroit Firm

Morris Krause, formerly in the baker's supply business, has organized the American Warehouse Co. in Detroit and has taken over 12,000 square feet of floor space at 1520 Fifteenth Street in the city's west side commercial district. He will specialize in sugar processors' stocks and a limited line of other food-stuffs.

The company plans to erect an addition on ground in rear of present warehouse.

Creating New Liquor Storage Business by Serving As "Go-Between" for Wholesaler and Banker

By LUCIUS S. FLINT

IF you are looking for more liquor storage business, enlist the cooperation of your local banks in financing new wholesalers or small established ones which haven't the money for all the stock they need.

The Springer Transfer Company, Albuquerque, N. M., has followed the plan very successfully. The company has had as much as \$450,000 worth of liquor in its warehouse at one time—most of which was handled on this basis.

Where banks have agreed to finance wholesalers, the warehouse works closely with them. No liquor is released to the wholesale houses except on a signed order from the bank. Thus the banks are fully protected and the wholesaler gets the amount of merchandise to which he is entitled.

The Springer firm gets straight tariff rates for the storage and handling.

Storage amounts to 5 cents a case and handling to 5 cents. A collection charge of one-half of one per cent is made, with a maximum of 50 cents.

After several people had come to him for aid along this line, W. P. Brannin, manager of the warehouse department, saw the possibilities in developing further business and went out after it. He has gotten plenty.

"In our opinion, this is the very best way to handle liquor storage," according to Mr. Brannin. "We don't have to pay the Government anything and we don't have a lot of detail work. It's a straight business proposition on storage and handling.

"There is certainly extra business to be had by arranging financing for wholesalers. The warehouseman can serve as a valuable 'go-between' for the wholesaler and the financing agency and thus

establish himself firmly with both of them. Of course we have the wholesalers agree to use our service if we succeed in getting them the merchandise. And the banks are ready and willing to put up the money if they are sure of getting it back."

Another factor in producing extra revenue for the Albuquerque warehouse is an unusual sample room arrangement. Three specially-built rooms having a separate street entrance are regularly rented to shoe salesmen.

In the company's warehouse dock is a unique loading feature. The all-concrete dock is approached from the street at one end by a concrete ramp wide enough for cars to be driven up. Thus a truck can back right up to a freight car door and one handling operation is eliminated.

Liquor Warehousing in Idaho

By M. A. COMPTON

Manager, Compton Transfer & Storage Co. Boise, Idaho.

AT the last general election in Idaho our State Prohibition laws were repealed, subject to the establishment, by our State Legislature, of some regulatory methods of liquor distribution and sale.

Inasmuch as our sister States Oregon and Washington had adopted the State store system, the writer felt that undoubtedly Idaho would follow suit.

As a result, a careful survey was made of the methods used in both States, and a summary follows:

In Washington the Commission established its own warehouses in leased buildings operated by State employees. A survey of this operation revealed that it cost the Commission \$56,443.17 to warehouse 500,000 cases of liquor at 11½ cents a case, not including administrative overhead. While this cost in itself was an excessive amount, many distillers took advantage of the fact that the new Commission was not experienced in buying, and they overstocked the Commission with slow-moving or unsalable merchandise which, when received into the State warehouses, obliged the State for payment thereof. The loss in the sales of these items undoubtedly amounted to many times the warehousing costs.

In contrast with the Washington method, the Oregon Commission handled its warehousing through commercial warehouses established in Portland. Dis-

FOR the information of warehouse companies which handle liquor accounts Mr. Compton has written the accompanying text for *Distribution and Warehousing*.

tillers were permitted to place stock in bailment from which purchase orders were issued. Consequently the Oregon Commission was obligated for a minimum cost of assembling orders for its stores from these bailment stocks and were obligated for the payment of only that stock actually purchased.

When the Idaho State Legislature met it provided for operation of State stores in Idaho. With detailed information available regarding the warehouse operations in Oregon and Washington, the Idaho Commission was convinced that it would be more economical and satisfactory to use commercial warehouses and to establish its own storage plants.

Our State being more than 800 miles long and 200 miles wide at the base, a difficult problem of distribution was presented, and truck and rail rates from any central point were exorbitant.

Consequently three warehouse stocks were established and bonded to the Commission—one at Pocatello, the Jennings

Cornwall Warehouses, Inc.; one in Lewiston in the north, the Starr Dray Transfer Co.; and a central warehouse at Boise, the Compton Transfer & Storage Co.

The Liquor Commission then leased in each of the warehouses a small section for assembling and splitting orders for their stores and dispensaries. All merchandise entering the State must be shipped in bailment to one of these three warehouses, from which delivery is made. A further rule was established that no purchase would be made from any bailment unless the Liquor Commission had granted permission to the distillers to place such stocks in bailment.

While from a geographic and economic standpoint it was wise to establish three warehouses, such an arrangement made it necessary for each distiller to purchase three Federal \$100 liquor stamps. A ruling by John A. Viley, United States Collector of Internal Revenue, stated that it was necessary for the distiller to post a stamp at each point from which sale was actually made.

The Commission, realizing that the purchase of three stamps by companies selling small quantities to the State was an imposition, suggested they post only one stamp, with the Compton Transfer & Storage Co., and by a power of attorney authorize this firm to release merchandise from the other two warehouses;

by so doing, sale would be consummated at one point. For the service of releasing merchandise from the Pocatello and Lewiston warehouses, the Compton company receives 25 cents per purchase order from the distiller. This plan apparently has met with enthusiastic response from those concerned in the business.

Utah Warehousemen Seek Right to Store Liquor; Systems Being Studied

THE Utah Warehousemen's Association has created a special committee to contact the Utah State Liquor Commission on the problem of liquor storage.

The Utah Legislature recently enacted a law repealing the Prohibition Act of 1917 and setting up a rather strict State-stores system.

The warehouse group believes that the State would do as well, and most likely better, by letting public warehouses handle the liquor, and the Utah W. A. committee appointed is surveying the situation.

Hugh B. Brown, the committee's chairman, left for the Pacific Northwest in April to make a study of the State liquor store systems in operation in that section. Meanwhile H. L. Love, Salt Lake City, secretary of the Utah W. A., is assembling data designed to show how much money is invested in Utah warehouses, how many employees there are, what floor space and services are available, etc., so that if and when the industry is granted a hearing by the Commission the latter will be in a position to see at a glance that commercial warehousing is important, well equipped and efficiently organized.

Governor Blood has already been approached by the warehousing group but nothing will be decided until Mr. Brown, who is an attorney, returns from his trip to the Northwest.

Michigan Liquor Commission Issues Transport Rules

RULES for transporting liquors in Michigan, and supplementing previous ones for warehousing such products, have been issued by the Michigan Liquor Control Commission. They apply to all common carriers operating in the State. A summary of the transport rules, as prepared for *Distribution and Warehousing*, follows:

Beer, ale, stout, and porter may be shipped into the State only when consigned to a designated warehouse to have excise tax stamps attached; and all shipments within the State must be in containers having such stamps attached.

Other alcoholic liquors may be accepted for transport only when consigned to the Liquor Control Commission or its duly authorized representative, whether originating within or without the State.

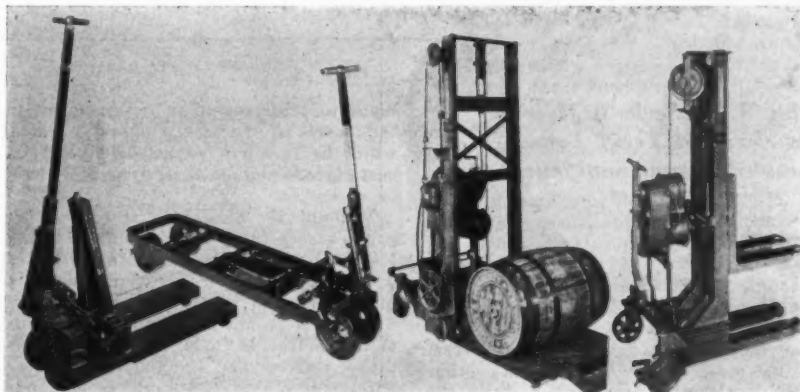
Shipments from Michigan wineries, rectifiers, and distillers may be accepted

for shipment to points outside the State only when a Commission certificate of release is presented.

"Pure ethyl alcohol, spirits, cologne spirits, whiskies, brandy, high wine, low

wine, for manufacturers, rectifiers, and wineries, and sacramental wine" may be shipped to authorized consignees only when the Commission has given a certificate of release.

Barrett-Cravens Offers New Handling Equipment



FOUR new models have been brought out by the Barrett-Cravens Company, Chicago . . . a "Speed Boy" lift truck, a tin-plate truck, a tin-plate elevator, and a barrel elevator.

The lift truck is a multiple lift type of 3,550-lb. capacity. It has a full lift of 3 in. The telescopic frames give it a high under frame clearance, enabling it to negotiate bad floor conditions, or when trucking on and off of motor trucks or unloading platforms. This truck will lift with 4 or 8 strokes of the handle. It is ball bearing equipped and designed to give extreme ease and speed in operation.

The tin-plate truck, designed for the elimination of expensive power equipment, is especially adapted for warehouses handling carloads of tin-plate shipped in small boxes. It is only 3½ in. high in the lowered position and as a result is capable of handling the skids or pallets on which tin-plate is normally shipped and which have a 4-in. underneath clearance. This truck is of the "fork" type, enabling it to handle pallets or skids with either two or three runners.

The tin-plate elevator, used to double and triple deck pallets of tin-plate, enables a warehouse to conserve space when handling considerable tin-plate and holding it for some time. This elevator is hand-operated and has two hand speeds. All of the gears are totally enclosed and run in oil. Descent of the load is uniform through the use of a governor control. The platform, or lifting end of the device, is only 3½ in. high. The wheels operate on ball bearings. This model has an auto steer.

The barrel elevator enables quick storing of barrels on top of one another. This model may be had in either hand or electrically operated type. A low platform of only 1½ in. height is provided. Specifications of the electrically operated model include a capacity range of from 500 to 750 lbs., a 30-in. square

platform, 6-in. Hyatt bearing equipped wheels, "dead man" cable control, top and bottom limit stops, direct motor drive with no chains, electric brake which is integral with the motor, removable steel barrel incline, auto steering, and an automatic floor lock. The hand-operated model, of the same capacity as the electric type, has such features as cut gears fully enclosed and running in oil, governor control, and two hand speeds.

Omaha Warehouses Need Not Report on Goods Removed

A tax-report opinion of significance for national distributors placing stocks in Nebraska warehouses has been given by Assistant County Attorney Marer of the county in which Omaha is situated.

County Treasurer Bauman sought Mr. Marer's opinion as to whether warehousemen were obliged to report removals of stored goods from their custody, particularly when removed from within the State.

Holding that there was no such obligation on the part of warehousemen, Mr. Marer ruled that warehousemen were compelled to notify tax assessors of property stored on April 1, and to permit inspection of the goods, but need go no further.

Inventory Control and Customers' Complaints

The Policyholders Service Bureau of the Metropolitan Life Insurance Company has made public two reports of interest to business executives. One is titled "Inventory Control Methods" and the other "Methods of Handling Customer Complaints."

Copies may be had without cost by writing to *Distribution and Warehousing*.

WITH THE ASSOCIATIONS

HERE is presented in tabloid form the Association news that is of *general interest* to the industry as a whole. No effort is made to publish complete reports of all Association meetings; the dissemination of such information is logically the work of the officers and the committee chairmen. What is presented here is in effect a cross-section review of the major activities so that Association members may be kept advised as to what "the other fellow" elsewhere in the country is thinking and doing. When annual or semi-annual meetings are held, more extended reports will occasionally be published.

Ohio W. A. Seeks to Have Standardized Tariff Form Adopted Throughout State

A MERCHANDISE warehousing standardized tariff form, proposed by the Ohio Warehousemen's Association, has been sent to the trade's members throughout the State by S. A. Sted, Cleveland, the organization's president.

The Association of Cleveland Warehousemen unanimously adopted the form at its meeting on April 8, and other Ohio locals were expected to take the same action.

In the past the trade's Standard Contract Terms and Conditions as adopted by the American Warehousemen's Association and approved by the Department of Commerce and by NRA have been utilized in Ohio in a more or less hit and miss fashion, with each operator placing an individual interpretation on them. It is the ambition of the Ohio W. A. to bring about State-wide adoption of a standardized document which would be interpreted uniformly in accordance with needs and rates in the various parts of the State.

This, it is pointed out by the sponsors, would be distinctly a service to national distributors and others wanting tariff information. While charges might vary according to districts, the rules and regulations would be presented in the same way and indexed in the same order. With such a standardized form, it is explained, the terms and conditions would be more readily understood and much confusion would be avoided.

Household Code Provisions Working in Connecticut

PROVISIONS of the household goods Code are being observed generally throughout Connecticut and western Massachusetts and a large majority of movers are maintaining compliance on rates. T. M. Johnson, field man, told the Connecticut Warehousemen's Association at its April meeting, held in New Haven.

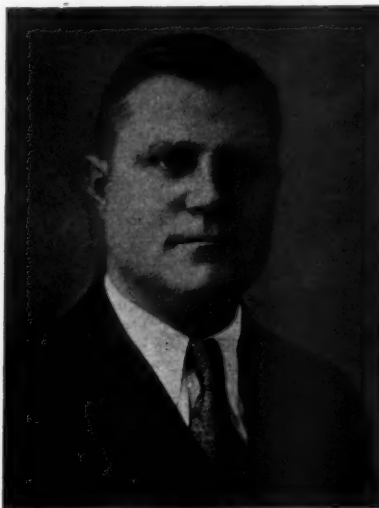
Mr. Johnson said that a survey had revealed that most of the movers in the territory were now charging by the hour, and that rate standards were much improved. He said most movers seemed to be pleased at the progress made in Code enforcement.

Edward G. Mooney, Hartford, agreed that moving rates were generally stabilized, but suggested that efforts be

made to bring about an improvement in the level of furniture storage rates, which he said now varied widely. Members agreed that such a program would be desirable.

William H. Schaefer, Stamford, the group's secretary, cited a ruling of the National Industrial Recovery Board which apparently meant that furniture movers located outside of metropolitan districts were not under the jurisdiction of the household Code. If this interpretation was correct, he pointed out, Code enforcement activities might be seriously curtailed. He was authorized to obtain data on metropolitan districts contained in the 1930 Federal census and report at the May meeting.

Melvin Bekins Heads a Local Formed in Omaha



Melvin Bekins

MERCHANDISE and household storage executives in Omaha organized the Omaha Warehousemen's Association at a meeting in April. Following are the officers elected:

President Melvin Bekins, manager Bekins Omaha Van & Storage Co.

Merchandise Vice-President, Harry H. Viner, president Pacific Storage & Warehouse Co.

Household Goods Vice-President, Joseph Moron, operating executive Gordon Storage Warehouses, Inc.

Secretary-Treasurer, J. M. Weare, owner Saratoga Transfer & Storage Co.

Denver Movers' Pact Is Working Satisfactorily After 4 Months' Trial

NOT a single complaint has been made against the labor agreement between members of the Denver Movers' and Warehousemen's Association of Denver and local union 444. The agreement became effective Jan. 1 and automatically established mandatory minimum wages and other labor provisions for the entire Denver area. After nearly four months of operation the plan is described as "very successful".

Forty-two companies have signed the agreement to date. They include all of the fifteen Class A and nearly two-thirds of the Class B operators, and a majority of the remaining B members are expected to sign in the near future. However, as the contract has been signed by a majority of the industry the wages and labor provisions automatically become the minimums for the area; and, having been made part of the trucking Code, will be binding on all operators whether or not they sign.

Employers and employees alike are united in their determination to make the agreement really effective and all indications are that it will be more effective than it has shown to be in the past few months. The regional director of the Federal Labor Advisory Board has made numerous inquiries about the agreement and is being supplied with information that will help him. He has complimented this progress highly on several different occasions, and indications are that the contract will evidently be used in arriving at agreements between other independent groups.

It is believed that the increase in wages, which places minimums substantially higher than the levels set in the various Codes, is certain to bring a better price standard, because operators cannot pay the required scale and still cut prices.

The agreement, completed without the aid of either State or Federal boards, is based on mutual recognition, by employers and employees, of the fact that fair wages and hours are essential not only to decent living conditions but also to profitable business operation. Labor leaders and heads of the warehousemen's association worked hand in hand to drive home this fact to the few operators who failed to recognize it originally.

—D. F. Kinney.

Long Island Household Operators Organize

LONG ISLAND storage executives, operators of both fireproof and non-fireproof household goods warehouses, and including some within metropolitan New York City but segregated in a general way on Long Island, organized the Long Island Warehouse Association at a meeting in Jamaica on April 4. Officers were elected as follows:

President, J. F. Fitzgerald, manager Queensboro Storage Warehouse, Inc., Richmond Hill.

Vice-President, J. E. Winham, Kew Gardens Storage Warehouse, Inc., Kew Gardens.

Secretary, A. C. Muller, Forest Hills Fireproof Storage Co., Inc., Forest Hills.

Treasurer, Joseph Bloomfield, New York & Queens Storage Co., Inc., Long Island City.

The foregoing are all members of the New York Furniture Warehousemen's Association.

The association starts off with a membership of about twenty-five.

Maryland Merchandise Group Elects Settle

THE Maryland Warehousemen's Association held its annual meeting, at the Emerson Hotel in Baltimore on April 11, and elected officers as follows:

President, Norman C. Settle, treasurer McCormick Warehouse Co., Inc., Baltimore.

Vice-President, M. A. Myers, general freight agent Canton Co. of Baltimore.

Secretary, H. C. Konow, general superintendent Baltimore Fidelity Warehouse Company, Baltimore.

Treasurer, Wilson L. Haines, secretary-treasurer Terminal Warehouse Company, Baltimore.

The group meets each second Thursday of the month at 12:30 P. M. at the Emerson Hotel.

Jersey Group Reduces Dues

Announcement was made at the March meeting of the New Jersey Furniture Warehousemen's Association that the board of directors had voted to lower members' dues for 1935. The reduction amounts to 20 per cent.

New Membership Affiliations

Association of Cleveland Warehousemen:

Britten Terminal, Inc.

Michigan Furniture Warehousemen's Association:

A. S. Boyd, Flint.

Frank H. Cass, Detroit.

P. S. Chase, Flint.

Chester Moving & Storage Co., Detroit.

H. H. Gane, Flint.

Harris Truck & Storage Co., Bay City.

John F. Ivory Storage Company, Inc., Detroit.

Frank H. Wilson Moving & Storage Co., Flint.

Midwest Warehouse and Transfermen's Association:

A. C. Transfer Co., Arkansas City, Kansas.

Peoples Cab & Transfer Co., Wichita.

Southwest Transfer & Storage Co., Wichita.

Southwest Warehouse and Transfermen's Association:

East Texas Terminal Warehouse Company, Tyler, Texas.

Bill for a "Department of Transportation" Offered

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

MOTOR trucking and wharfing, together with rail and water transporting, would be placed under the jurisdiction of a Department of Transportation, directed by a Secretary who would have a place in the Federal Cabinet, under a bill which has been presented by Representative Compton I. White of Idaho.

The measure was prepared and submitted at the request of Captain Arthur Ward of Lewiston, Idaho, who is vice-president of the Rivers and Harbors Congress, an official of the Lewiston Chamber of Congress and active in shipping. It is before the Committee on Interstate and Foreign Commerce, where it will have consideration in conjunction with the Eastman transportation regulatory bills. The bill would abolish the Interstate Commerce Commission as of June 30, 1935.

Jurisdiction of the department would be expansive, covering subjects including common, contract and private carriers by rail, water, air, highway or any other transport mediums. One section of the bill reads:

"The term 'wharfing' means any person, not included in the terms 'common carrier,' 'contract carrier,' or 'private carrier,' as defined here, who or which owns, operates, manages, or controls any wharf or pier, or any dock or other water space for the accommodation of vessels, or any warehouse, yard, grounds, or other facilities or equipment of any kind in or in connection therewith, and holds himself or itself out to furnish any such facility, at any place within the United States or any Territory or possession thereof, for compensation or hire, in or in connection with transportation by water carriers of passengers or property of any class or classes thereof in interstate or foreign commerce."

—James J. Butler.

"Wharfing" as used in the foregoing Washington Bureau story is not a typographical error!

"Wharfing"—which does not appear in dictionaries—is in the language of the bill.

Will Congress innocently but officially coin a new word for the well-known English language?

587 Bidders for Storage of Government Canned Meats

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

THE Federal Surplus Relief Corporation on April 17 opened bids, under its Schedule 130, for storage of canned meats processed from animals removed from the drought regions by the AAA.

There were 587 bidders. These for the most part were established public warehouse companies identified with the industry's trade associations. However, more than twenty-five meat-packing and fruit-canning organizations submitted bids, and there were scattered quotations from interests representing fruit growing, seeds, ice cream, produce, tobacco, foods and stevedoring, together with several bids from municipal plants and one from an "agent." More than forty of the States are represented.

The FSRC indicated that contracts would not be awarded until well into May.

—James J. Butler.

The bids mentioned in the foregoing Washington Bureau correspondence were being analyzed early in May by H. A. Haring, *Distribution and Warehousing's* contributing editor, and will be discussed by him next month.

New York Bill Would Support Warehousing's Code Efforts

One of the New York State Legislature's enacted bills awaiting the signature of Governor Lehman late in April was one which would require all State and municipally-operated industries to comply with NRA Codes where such pacts exist.

William T. Bostwick, New York City, on April 19 bulletined all members of the New York State Warehousemen's Association, of which he is secretary, to wire immediately to Charles Poletti, counsel to Gov. Lehman, urging the State's chief executive to sign the bill. "This law should mean much to all members," the bulletin concluded.

Milwaukee Cartage Strike Ends; Drivers' Pay Is Up

WITHIN two weeks after the start of a strike by more than 200 union truck drivers employed by Milwaukee heavy cartage companies, a settlement between the firms and Local No. 242 of the Teamsters, Chauffeurs, Stablemen and Helpers' Union was reached on April 1.

The agreement, to run for one year, accepts the Local as the bargaining agent for its members and grants pay increases of approximately 25 per cent.

The employers who have recognized the union have organized the Milwaukee Cartage Exchange to act as their bargaining agent. Charles J. Sullivan, of the Hansen Storage Co., was elected president.

**Earl W. Jones Dead at 53;
Headed United Company in
Wichita and Kansas City**

EARL W. JONES, president of the United Warehouse Company, Wichita, Kansas, died apparently from a heart attack while in the firm's offices at Rock Island and Second Streets on April 6. An employee found him stricken and a physician reached his side too late. He had been suffering with a heart ailment but had seemed in excellent health otherwise. He was 53 years old.

Mr. Jones was a charter member and a past president of the Wichita Warehouse and Transfermen's Association and a member of the merchandise division of the American Warehousemen's Association and the Midwest Warehouse and Transfermen's Association. His company operated also in Kansas City, Mo.

Born at Alta, Iowa, on Nov. 23, 1882,



Earl W. Jones

Mr. Jones removed at the age of five to Pratt, where he attended the public schools, later going to St. John's Military Academy in Salina and to the Chicago Institute of Technology, where he was graduated in 1907. While in Chicago he met Hortense H. Powers, whom he married in 1908 and who is secretary of the United. Surviving also is a brother, Lee B. Jones, the company's vice-president and manager of the Kansas City property.

Following residence in Pratt and Kansas City, Mr. Jones went to Wichita and became vice-president and manager of the United, later accepting the presidency. In Wichita he was one of the organizers of the local Rotary Club and a member of Midian Shrine, A. A. O. N. M. S. and was a thirty-second degree Scottish Rite Mason.

Funeral services were held on April

8 and were attended by a large delegation of warehousemen and by representatives of the Shriners and the Rotary Club.

**Merryl Schwind, Editor
and Writer, Dies at 32**

MERRYL SCHWIND, for the past few years editor of *The Furniture Warehouseman*, the official organ of the National Furniture Warehousemen's Association, died in April at Chicago, where the magazine is published. In private life she was the wife of Ralph A. Martin, a Chicago attorney whom she married in 1932.

Daughter of Mr. and Mrs. Milton Schwind, Kansas City, Mo., Miss Schwind was Kansas City correspondent for *Distribution and Warehousing*. She removed to Chicago to edit the N. F. W. A. publication and in that capacity became nationally known in the industry.

Miss Schwind was 32 years old. A severe cold and nervous breakdown contributed to her death. Funeral services were held in Kansas City on April 19, and burial was at Lincoln, Neb.

Frank F. Bacon

Death of April 17 took Frank F. Bacon, partner of Whitaker & Bacon, a merchandise storage and transfer company at 409 Windsor Street, Hartford, Conn. He was 62 years old. His home was in Wethersfield.

Born in Sherman, N. Y., Mr. Bacon as a youth was a cowboy in Montana. He settled in Middletown, Conn., in 1895 and in 1914 removed to Hartford, where for periods he was associated with the Bill Brothers Co. and with the Roger Sherman Transfer Co. About twenty years ago he became a partner of Whitaker & Bacon. He was a member of the Connecticut Warehousemen's Association.

James N. Shedd

James Newton Shedd, formerly for many years president and treasurer of Shedd & Campbell, Inc., once a merchandise and household goods storage company in Hartford, Conn., died on April 14 at his home in West Hartford. He was 85 years old.

Mr. Shedd founded the business in 1900 and relinquished active management about twelve years ago to his partner, Charles E. Chappell. The firm discontinued operations several years ago.

S. C. Lockman

Stuart C. Lockman, vice-president and general manager of the Detroit Union Produce Terminal, died in a Detroit hospital on April 9. He was 49 years old.

Mr. Lockman was formerly connected with the Wabash Railroad as traveling representative. He had been associated with Produce Terminal for a number of years.

**Death Removes John G. Neeser;
New York Executive, 64, Was a
Vice-President of N. F. W. A.**

JOHAN GASPER NEESER, president of the Manhattan Storage & Warehouse Company, New York City, and eastern vice-president of the National Furniture Warehousemen's Association, died on April 14, at the age of 64, in the New York hospital. He had entered the hospital for an operation immediately on his return, in February, from a visit to France. He was thought to be on the road to recovery, but pneumonia developed and his heart finally succumbed.

Long nationally known in the industry, he was a member of the national Code Authority for the Household Goods Storage and Moving Trade and was a director of the New York Furniture Warehousemen's Association.

Other institutions not in the warehousing field claimed Mr. Neeser as an officer. He was president of the Catho-



John G. Neeser

lic Institute for the Blind and a trustee of St. Patrick's Cathedral, as well as being active in many Catholic philanthropies, and was a member of the University, Union, and Columbia clubs.

Mr. Neeser spent much of his life in his birthplace, New York, even before he became president of the Manhattan. He was graduated from Columbia in the days when it was still a college and served ten years in the Seventh Regiment National Guard Infantry, Company K, of New York. He left his office as vice-president of the Manhattan to serve nineteen months in France as a major in the U. S. Sanitary Corps, in the World War, and returned to New York to become president of the company in 1919. This office he held until his death.

In his capacity as president, Mr.

Neeser was a member of the National Furniture Warehousemen's Association; the American Warehousemen's Association, both merchandise and cold storage divisions; the Canadian Storage and Transfermen's Association; the British Association of International Furniture Removers; the New York State Warehousemen's Association, and the New York Furniture Warehousemen's Association.

These New York groups, together with the New Jersey Furniture Warehousemen's Association and the Van Owners' Association of Greater New York, were represented at the mass of requiem in St. Patrick's Cathedral on April 16. There were about fifty warehousemen in the gathering. Mons. Lavelle, high priest of St. Patrick's and one of Mr. Neeser's intimate friends, delivered the eulogy, in which he spoke of Mr. Neeser's unselfish effort to promote the interests of his fellow men as well as those of the church. The National and

New York associations sent floral offerings. Burial was private.

Mr. Neeser had never married. Two sisters, Miss Elvine L. Neeser, of New York, and Mrs. Charles T. Lestelle, of Paris, France; and a brother, Robert W. Neeser, of Paris, survive.

Arnold C. Hansen

Funeral services for Arnold C. Hansen, formerly for several years associated with the New York Dock Company and the Bush Terminal Company, New York, were held in Garfield, N. J., on April 18. He was 56 years old.

At the time of his death Mr. Hansen was chief accountant of the Federal Communication Commission, at Washington. He withdrew as controller of New York Dock in 1920 to open his own office in New York and not long thereafter went to Washington as Internal Revenue Bureau senior auditor. Earlier

he had been accountant and auditor for the Erie Railroad and Bush Terminal, and had at one time been chief of the New York office of the Interstate Commerce Commission.

A. S. Brinckerhoff

Albert S. Brinckerhoff, founder and formerly secretary-treasurer of the Utica Cold Storage and Warehouse Company, Utica, N. Y., died on March 10 in his seventy-fifth year.

A native of Fishkill Landing-on-Hudson, he removed to Utica in 1892 and later organized the warehouse firm. He retired several years ago.

A. D. Prouty

Albert D. Prouty, general manager of the Curtis Storage & Transfer Co., Indianapolis, died in a local hospital on March 25 after a brief illness. A World War veteran, he was 36 years old.

Miami Beach Warehouse Company Restores Rugs and Writes Their Biographies as a Side Line

WITH "Rug Restoration" and "Rug Laboratory" lettered on the doors, a departmental side line, its character indicated by the two titles, has been created by the Washington Storage Co., Inc., Miami Beach, Fla.

Horace C. Ettie, an authority on rugs, is in charge as the department's superintendent. He has spent many years in the world's leading rug centers, including Egypt, Persia, China, Syria and India, making a study not only of the textiles but of the history of rug-weaving. Each type and kind of rug demands a particular cleansing process if it is to be preserved and kept beautiful, according to Mr. Ettie.

Equipped with special machinery, the department occupies space about 60 by 150 feet, including a large outside cleaning floor for unusual or oversize rugs.

In the laboratory is an extensive library on the subject of rugs and cleaning fluids. Here is also a chemist whose business it is to develop the proper formula to be used on each job brought in. There is no guess-work; accuracy is the objective. Different kinds of cleansers are available for any kind of a carpet. The idea is not only to clean a rug but to preserve it.

Climatic conditions in southeastern Florida are hard on rugs. In Miami Beach in particular there is also the added problem of sand to be considered. A rug must be thoroughly shaken and cleaned so as to remove all sand particles, then treated for moths and the numerous insects and fungi which infest textiles of any kind. This is done in a scientific manner in the restoration plant.

It is not only fine Oriental rugs that are brought here for care. Hotels in particular prefer to have their floor-covering looked after by this firm. A recent order

was for renovating 25,000 yards of carpet.

The department repairs fine rugs, even copies any design on hand looms. Another service offered, and one which is proving popular, is to furnish the history or biography of an old rug. Mr. Ettie, because of his broad knowledge and experience, can do this. Frequently a rug is brought in the age and history of which is not known to the owner. Mr. Ettie immediately recognizes it and can place it where it belongs. If the owner is interested, a biography of the rug is written. Sometimes this is prepared in form for framing; again it may be a booklet with expensive leather cover. People like to have these histories and are willing to pay for having them compiled.

To Draft Truck Rate Agreement

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

CHARGED with the responsibility of drafting a rate agreement for the trucking industry which will be satisfactory to the National Recovery Administration, a special committee has been appointed by the American Trucking Associations, Inc., and has held several sessions here.

NRA has looked askance at rate agreements for truckers, but the National Code Authority, and leaders generally in the industry who favor such an arrangement, believe one can be prepared that will overcome objections.

The committee also will examine the cost formula and make recommendations for improvements.

The personnel of the committee in-

cludes C. Fair Brooks, secretary Brooks Transfer & Storage Co., Inc., Richmond, Va.; and W. E. Humphreys, president Jacobs Transfer Co., Inc., Washington, D. C., and Baltimore.

—James J. Butler.

NRA Grants Adjustment of Freight Forwarding Wages

DISTRIBUTION AND WAREHOUSING'S WASHINGTON BUREAU, 1157 National Press Building.

WAGES of workers under the domestic freight forwarding industry Code may be adjusted providing that the weekly or months' wage rates for the reduced work-week shall not be less than those for the longer pre-Code week, the National Recovery Administration has ruled.

Code maximums are 40 and 48 hours a week, which is substantially less than those of the pre-Code era.

As a result of this ruling, wages of employees who receive more than the minimum rates prescribed in the compact may be adjusted downward, but must stop at a point matching wages paid before the industry was codified, even though there is a wide disparity in the number of hours worked.

—James J. Butler.

Franchise Carriers' Agency in Portland

Warehousing, motor freight and forwarding interests in Portland, Ore., have organized the Association Franchise Carriers Agency to serve shippers.

Those identified with the new group include the Security Van and Storage Co., Inc., and the S. & M. Transfer and Storage Co.

New Incorporations as Announced Within the Storage Industry

Arkansas

Little Rock—Hot Springs Ice Co., Inc. Cold storage warehouse and ice plant. Capital \$20,000. Incorporators, C. V. Updegraff, Little Rock; and M. M. Brandon, Poplar Bluff, Mo.

California

Long Beach—Ace Van & Storage Co., 310 East Seventh Street, has filed notice of company organization. C. W. Carlstrom, 3720 El Cajon Avenue, San Diego, heads the interests.

Los Angeles—Ray's Transfer, Van & Storage Co. (organized), 1242 West Manchester Avenue. Warehousing, van and trucking services. Ray Hampton heads the interests.

Illinois

Chicago—Anchor Forwarding & Distributing Co., 656 North Green Street. Capital 1,000 shares of no par value stock. Incorporators, John P. Carroll and Robert E. Carroll.

Chicago—Gulf Warehouse and Sales Company, 120 South La Salle Street. Capital 750 shares of no par value stock. Incorporators, Beverly B. Vedder, Virgil M. Hancher and William F. Price.

Indiana

South Bend—White Van Line, Inc. Capital 1,200 shares of no par value stock. Incorporators, Lawrence W. Redman, Virgin B. Swaim, Floyd R. Young, Dewey F. Rodgers, Orville C. Clark, Elzie Ferguson and William A. Wilkinson.

Kentucky

Louisville—Central Terminal Warehouse Company. Capital \$50,000. Incorporators, David Shropshire, William Addams, R. W. Roundsavall and Ethel Roundsavall.

Michigan

Saginaw—Saginaw River Dock Co., North Niagara Street. To operate warehouse terminal and dock properties. Capital 25,000 shares of no par value stock. Herbert C. Remer is principal incorporator and heads the interests.

New Jersey

Harrison—Sinn's Warehouse Corp. 22 Railroad Avenue.

Newark—Industrial Warehouse Corp. Capital \$20,000. Agent, Philip B. Rothschild.

New York

Binghamton—Binghamton Refrigerating Co., Inc. Cold storage warehouse and refrigerating plant. Capital 1,000 shares of no par value stock. Principal incorporator, Floyd E. Anderson, 702 Chenango Street, Port Dickinson, N. Y.

Brooklyn—Elk Moving & Storage Co., Inc. Warehousing and trucking. Capital \$5,000. Incorporators, Peter Speroni and Joseph Carini, 1014 New York Avenue.

New York City—Rockefeller Center Warehouses, Inc. Capital 100 shares of no par value stock. Incorporators, John

P. Hanson, 1324 Roosevelt Avenue, Pelham Manor; Francis T. Christy, 44 Grace Court, Brooklyn; and Rudolph A. Travers, 1401 University Avenue.

Syracuse—Bonded Freightways, Inc. Storage, transfer and motor freighting. Capital 500 shares of no par value stock. Incorporators, William Kupperman, 422 Westmoreland Avenue; and Harry Kupperman, 2413 East Genesee Street.

Utica—DeLuxe Warehouse, Inc. Capital \$10,000. Incorporators, Max Lichtman, 41 Emerson Avenue; and Harry Levinthal, 33 Leslie Avenue.

Ohio

Cincinnati—Ohio Transfer & Storage, Inc. Capital \$25,000. Incorporators, Sol Goodman, 1209 First National Bank Building; William M. Durrett and A. M. Erricson.

Cincinnati—Standard Transfer, Inc. Capital 100 shares of no par value stock. Incorporators, Joseph W. Barker, Charles Scull and Edwin K. Levi.

Tennessee

Memphis—Shelby Warehouses, Inc. Capital \$5,000. Incorporators, Lewis R. Donelson, Jr., 1677 Autumn Street; Andrew J. Donelson and Stewart M. Poston.

Texas

Dallas—Southern Ice Co. Cold storage warehouse and ice plant. Capital \$600,000. Incorporators, C. W. Hawley, 1536 Holly Street; and W. L. Martin.

Situation Wanted

BY rug and furniture plant manager. Man of many years' experience. Knows fabrics and the science of their thorough safe cleansing and refinishing. Efficient production manager of proven sales promotion ability.

Desires position anywhere with firm operating such a department, or will organize and develop one.

Highest credentials. Moderate salary to start.

Address Box C-175, care of *Distribution and Warehousing*, 249 West 39th Street, New York City.

Oklahoma City Purchase

Red Ball, Inc., Oklahoma City, has acquired the warehouse business, including the capital stock and five trucks of the Wilson Transfer & Storage Co. at 22 West California Street.

The purchase expends the Red Ball fleet to twenty-six trucks and gives the firm the entire pick-up and delivery service for Oklahoma City's railroads.

Toledo Blaze

Paper pulp valued at \$3,000 was ruined by fire and water as firemen fought a two-alarm blaze in a waterfront warehouse of Harbor Terminals, Inc., Toledo, on April 12. Damage to the building was estimated at \$500. Several firemen and a warehouse employee were slightly hurt. The origin of the blaze was not determined.

Construction Developments Purchases, Etc.

Arkansas

Little Rock—Southern Ice & Utilities Co. plans rebuilding its No. 2 cold storage and ice plant recently wrecked by fire with estimated loss of \$125,000.

California

Los Angeles—California Walnut Growers' Association has plans for a \$100,000 1-story warehouse, 420 by 700 feet, at Fruitland Avenue and Soto Street.

Placerville—Placerville Fruit Growers' Association has awarded a contract for a \$200,000 multi-story cold storage warehouse and pre-cooling plant.

San Diego—Lyon Van & Storage Co. has taken over the properties and assets of the Pioneer Truck and Storage Company with the authorization of the State Railroad Commission.

Canada

Kentville, N. S.—Nova Scotia Fruit Growers' Association is planning construction of a \$350,000 multi-story cold storage warehouse and pre-cooling plant.

Georgia

Statesboro—J. G. Tillman is planning to build a \$23,000 1-story warehouse, 100 by 200 feet, on College Street.

Illinois

Chicago—David Fireproof Storage Warehouses have let a contract for improvements in its warehouse at 3240 Lawrence Avenue. Frederick Stanton, who recently joined Distribution Service, Inc., as vice-president, is the architect.

Chicago—Sibley Warehouse & Storage Co. has filed notice of company dissolution under State laws.

Indiana

East Chicago—East Chicago Dock Terminal Co. has approved plans for extensions in dock and terminal facilities, with an additional 450-foot dock to cost about \$60,000 and to be used primarily for bulk liquid handling.

Kansas

Salinas—Nelson Transfer & Storage Co. has taken a lease on the building at 145 North Seventh Street.

Kentucky

Louisville—Whitney Transfer Company has established its own warehouse building at Tenth and Main Streets.

Massachusetts

Milton—Metropolitan Ice Co., Somerville, has tentative plans for a 1-story cold storage warehouse and ice plant on Blue Hill Parkway, Milton.

Michigan

Jackson—United States Truck Co., operating a motor freight and trucking service, plans to erect a \$25,000 1-story warehouse and distribution terminal on Oak Street.

(Concluded on page 60)

Career of T. F. Cathcart Is Reviewed in "Family Album"

(Concluded from page 37)

Dachshund, it had only four legs where it badly needed the bracing of six. But, notwithstanding all the handicaps, its youthful owner was now all set and ready for action.

The one-horse dray business prospered so that in June of 1903 Mr. Cathcart disposed of the little tobacco store to devote his entire time to moving and warehousing.

As fast as possible he added to his equipment until he had eighteen vans. This took twelve or fifteen years.

Meanwhile he met a young woman in the company of some acquaintances one evening and, from that moment on, he felt that his future was settled. The girl was from the opposite side of Atlanta but he found out where she lived and spent the next two years inducing her to become Mrs. Cathcart. They now have two sons, the eldest of whom, T. F., Jr., is associated with his father as partner in the warehouse business.

The original building in which Mr. Cathcart launched out as a storage executive was a single room of some 2000 cubic feet to start with. In fifteen years the business had grown and expanded until a new warehouse had been erected at a cost of \$265,000. This is a seven-story plant with all modern innovations such as rug rooms and so on. It necessitated the use of twenty trucks to serve it.

Mr. Cathcart still retains an interest in that plant, but on Nov. 1, 1931, he opened a new place, at 626-628 Spring Street Northwest—20,000 feet of storage space with a marble front and a plate glass window office. The new venture specializes in the handling of long distance moving affiliated with the Aero Mayflower Transit Company. It employs three trucks for local service and uses Mayflower vans for its long hauls.

Life's Philosophy

Based on his own experiences and on the ethics of the various warehousing associations, Mr. Cathcart has drawn himself a sort of personal code of conduct. He maintains harmony among his employees by never allowing them to squabble among themselves. The cross or disagreeable member of the staff must be eliminated in every instance. He does not permit the office force or heads of departments to be unkind to the laborers, nor does he allow anyone to use rough language around the warehouse or on the road.

His own attitude toward the employees is to "give everyone every penny that is due him and maybe a little more; encourage him to save some of it, and help him to be a better and a happier man, content and more efficient with each passing year." He believes that the average man can be trusted. "Show people that you are on the square and they will meet you half way," has always been his motto.

As for his attitude toward the public—and herein lies the secret which has

guided him on the long trail from a stony farm in Georgia to a mahogany desk in his own executive office—"always give your customers 100 cents worth of service for every dollar they pay."

Correction

Owners of the 1935 Warehouse Directory (published as part of the January, 1935, *Distributors and Warehousing*) should eliminate the words "Mgr. Reid C. Brockway" from the listing of Dunham & Reid, Inc., New York City (on page 257).

Substitute therefor the following: "Managing Executives, Walter L. Reid & Benjamin F. Brockway."

Position Wanted

In a managerial or assistant's capacity. Nine years' experience in furniture storage and moving. Age thirty-two.

Available Sept. 1.

Address Box F-478, care of *Distribution and Warehousing*, 249 West 39th Street, New York City.

Detroit Terminals' Reorganization

Notice of plan proposed reorganization of Detroit Harbor Terminals, Inc., Detroit, under the amended Federal Bankruptcy Act, was mailed to stockholders and bondholders in April. The property is being operated by Alex J. Groesbeck, a former Michigan governor, as trustee appointed by the United States Court.

Proctor Directs Lawrence's Eastern Seaboard Business

Richard C. Proctor has been elected vice-president of the Lawrence Warehouse Company, San Francisco, which specializes in field warehousing. He will direct operation in the Atlantic Seaboard States and has his offices at 52 Wall Street, New York City.

The Lawrence firm operates about 500 field warehouses in the United States, and has eleven offices in twenty-two States, Hawaii and Alaska. It handles some 200 commodities, with inventory values ranging from a few thousand dollars to \$30,000,000.

Detroit Purchase

Leo F. Stone, for the past two years associated with the Suburban Van Lines and the Siewert Fireproof Storage Co., both in Detroit, has purchased the interests from H. Siewert.

Suburban Van Lines will continue under that name, the organization having been reincorporated with \$5,000 capitalization and with Mr. Stone as sole stockholder. A new title will be selected for the warehouse firm.

New York Dock Increased Gross Storage Revenues in 1934 in Spite of Federal Competition

In the face of Federal and other competition and mounting taxes, the New York Dock Company, operating more than 3,000,000 square feet of storage space in ninety-five bonded warehouses along the Brooklyn waterfront, increased both gross and net operating revenues in 1934 as compared with 1933.

This is disclosed in the report submitted by the organization's president, D. L. Tilly, to the stockholders on April 14. The report covers the operations of the New York Dock Company and its wholly owned subsidiary, the New York Dock Trade Facilities Corporation.

"Reference was made in the reports for preceding years," Mr. Tilly informed the stockholders, "to the unfair competition to which the operations of your company have been subjected. Notwithstanding active steps taken to ameliorate those conditions, the amount of such competition, particularly from the tax-free government owned properties referred to in those reports, has not been reduced. Despite these continued handicaps, the results of operation of your properties show increases both in gross and in net operating revenues."

Revenues derived from storage operations amounted to \$668,613.60. This was an increase of \$244,630.53 as compared with 1933.

Revenues derived from piers and wharves totaled \$850,876.16, a decrease of \$53,540.43, this being the company's only department to produce lesser gross revenues than in the preceding year.

Manufacturing buildings returned gross revenues of \$1,095,498.70, or an increase of \$37,569 as compared with 1933.

These and other revenues aggregated \$2,964,274.22 in 1934—an increase of \$249,192.83 as compared with the preceding year.

Expenses

Total operating and administrative expenses were greater in 1934, as were Federal, State and city taxes. Gross income, after deduction of these and other expenses, amounted to \$826,959.04. Total deductions from gross income were \$935,693; and these, together with other charges during the year, resulted in a loss of \$567,018.22 for 1934.

Earned surplus on Jan. 1, 1934, totaled \$2,037,291.92. Subtracting from this the 1934 loss, and the balance of earned surplus as of date of Dec. 31 last was \$1,470,273.70.

Public Company Expands

The Public Warehouse Company, Oklahoma City, has remodeled its building at 5 Northwest First Street to effect more efficient handling of merchandise; has doubled its cold storage facilities by installing modern equipment; and has added a 2½-ton Federal truck to its fleet.

**Construction
Developments
Purchases, Etc.**

(Continued from page 58)

Mississippi

Crystal Springs—W. E. Garland has plans for a \$35,000 1-story cold storage warehouse and ice plant on State Highway 61. A pre-cooling plant is purposed for later date.

Missouri

Jefferson City—Commerce Cartage Co. has tentative plans for erecting a household goods storage warehouse.

Kansas City—Crooks Terminal Warehouses, Inc., has awarded a contract for a \$35,000 1-story service and garage building on site recently acquired at 1066-1072 Union Avenue.

St. Louis—Hayes Transfer Co. has filed plans for a \$25,000 1-story warehouse, 40 by 240 feet, at 825 South First Street.

Nebraska

Grand Island—Grand Island Storage & Forwarding Co. has filed notice of company dissolution under State laws.

Lincoln—Star Van & Storage Co. has purchased the Davis Express Co., which operated a motor freight line between Lincoln and Omaha, and the former is continuing that service on a daily schedule.

New York

New York City—Belmont Storage & Warehouse, Inc., 124 University Place, has arranged for change in company name to Belmont Sales Rooms, Inc.

New York City—Messinger Trucking Corporation, 604 West 37th Street, has filed notice of change in company name to Messinger Trucking & Warehouse Corporation.

Oklahoma

Tulsa—Hollis P. Porter, 609 Tulsa Loan Building, is having plans drawn for a \$25,000 1-story and basement terminal warehouse, 30 by 125 feet, at Cameron and Boulder Streets.

Oregon

The Dalles—Port Commission is seeking Federal aid to finance construction of two docks with warehousing facilities. Estimated cost \$200,000.

Pennsylvania

Bethlehem—Lehigh and New England Terminal Warehouse has joined the American Chain of Warehouses.

Philadelphia—North American Warehousing Co. has awarded a contract for extensions and improvements, to cost \$75,000, in its building at Mifflin and Vandalia Streets.

Texas

Corpus Christi—Morris Stern, Majestic Building, San Antonio, heads interests planning to erect a \$75,000 multi-story cold storage warehouse on Chaparral Street, Corpus Christi.

Washington

Davenport—Davenport Union Ware-

house Co. has authorized construction of a \$45,000 addition to include an elevator unit for grain service.

Dayton—Zumalt Warehouse Co. has plans for a \$22,000 1-story warehouse, 50 by 150 feet.

Marysville—Marysville Cold Storage Co. is planning construction of a \$50,000 multi-story cold storage warehouse.

Seattle—Bekins Moving & Storage Co. has let a contract for alterations and improvements in its warehouse at 1402 Twelfth Avenue.

Spokane—Consolidated Motor Freight Lines have awarded a contract for a 1-story and basement warehouse and freight terminal, 142 by 200 feet, at Pacific and Sheridan Streets, and a garage unit, 42 by 50 feet. Total cost about \$60,000.

Tacoma—Ice Delivery Co. has plans for a \$25,000 1-story warehouse and distribution building, 25 by 84 feet, at 612 North Tower Avenue.

Tonasket—Ellisforde Growers', Inc., plans erection of a \$50,000 3-story addition, 120 by 180 feet, to its cold storage warehouse.

Wisconsin

Janesville—George H. Hammes Transfer & Storage Company plans rebuilding portion of warehouse recently damaged by fire.

Wisconsin Rapids—Gross Brothers, operating a trucking business, have plans for a \$24,000 1-story warehouse, 60 by 100 feet, on McKinley Street.

**The Alex Flemings to
Live in United States**

ALEXANDER FLEMING, who last fall retired as general manager of the National Terminals of Canada, Ltd., Montreal, passed through New York on April 19, accompanied by Mrs. Fleming, on his way from St. Petersburg, Fla., where they had spent the winter, to visit their son in Montreal.

Mr. and Mrs. Fleming have deserted Canada as a place of residence. Their winters hereafter will be spent in St. Petersburg and their summers at Old Orchard Beach, Me.

The "grand old man" of the Dominion's warehousing business was associated with the industry nearly three decades. Seventy years old this May, he is a past president of the Canadian Storage and Transfermen's Association and just prior to his retirement was for several years president of the Montreal branch of that organization. He and Mrs. Fleming were long familiar figures at warehousing trade association conventions in the United States.

**Detroit Mover Now
in Warehousing**

Bernard Levine has acquired the Colonial Moving Company, a Detroit firm which he founded; has renamed it the Colonial Moving & Storage Co., and has entered the merchandise warehousing business with space in the Woodbrook Building, 5036 Joy Road.

**Woolley Appointed
Manager of Redman
Company, Salt Lake**

The Redman Van and Storage Company, Salt Lake City, Utah, has appointed a new vice-president and manager—Dilworth S. Woolley.

For the past four or five years Mr. Woolley has been resident manager in Salt Lake City for the Pacific Railways Advertising Company. Prior to that he was a member of the advertising staff of Stevens and Wallis, Inc., advertising agents and printers. He is affiliated with the Salt Lake Advertising Club, of which he is president, and with the Salt Lake City Junior Chamber of Commerce.

Mr. Woolley, 30 years old, is son of Judge Woolley of the 7th Judicial District of Utah. His ancestors were prominently identified with the history



Dilworth S. Woolley

of Utah. He was graduated from the University of Utah.

Mr. Redman remains as president of the firm, but other changes are announced. Miss M. Roby, treasurer, and associated with the firm for the past three decades, retires on a pension. H. M. Christensen will assume the duties of treasurer as well as secretary. Arvid Johnson, foreman, and with the company for twenty years, becomes superintendent.

Commercial Expands

The Commercial Warehouse Co., Oklahoma City, has enlarged its truck terminal facilities by extending the docks the full length of the 75-foot building, and on both sides of the building. This expansion makes it possible for the company to handle from 100,000 to 200,000 pounds of merchandise daily over the docks. Commercial has added an International truck to its fleet.

According to W. F. Tygard, the company's president, merchandise storage has begun to show encouraging signs of gradual increase.

When You Buy—Ask Us

It's always bothersome and time consuming to write all of the manufacturers for literature, prices, names of distributors and dealers, etc. In fact, you are not always sure that the list of manufacturers you are using is complete or that all of the worthwhile concerns are included.

The coupon below simplifies the purchasing of supplies for you. Just check the number corresponding to the alphabetically arranged list of materials below and on the next page, thereby indicating what you intend buying.

Without any obligation or charge whatever, Distribution & Warehousing will do all of the letter writing to see that the manufacturers of the particular classes of materials you are interested in send you prices, literature, etc.

This coupon is for your convenience and will be found in all future issues if you find it valuable. Use it for whatever you intend buying!

WAREHOUSE AND MOTOR FREIGHT SUPPLIES

- | No. | Product |
|------|-------------------------------------|
| 1. | Alarms (Fire) |
| 1a. | Alarms (Truck Burglar) |
| 2. | Boxes (Moving) |
| 2a. | Box Strapping (machines & supplies) |
| 3. | Brine |
| | Casters |
| 4a. | Dollie |
| 4b. | Truck |
| 5. | Chutes (Gravity Conveyor) |
| | Conveyors |
| 6a. | Overhead |
| 6b. | Portable |
| 7. | Cooling Eqpt. (for beer, etc.) |
| 8. | Cordage (Flat) |
| | Covers |
| 9a. | (Paper Furniture) |
| 9b. | (Piano) |
| 10. | Covers (Tarpaulin) |
| 11. | Dollies |
| | Doors |
| 12a. | Cold Storage—Equipment. |
| 12b. | Elevator |
| 12c. | Fire |
| 13. | Elevators (Building) |
| 14. | Elevators (Portable) |
| 15. | Excelsior |
| 16. | Exterminators (Rat or Mice) |
| 17. | Extinguishers (Fire) |

- | No. | Product |
|------|----------------------------------|
| 18. | Floor Repairing Material |
| | Fumigating Equipment |
| 19a. | Vaults |
| 19b. | Boxes or Cartons |
| 20. | Hoists (Chain & Electric) |
| | Insecticides |
| 21a. | Naphthalene Flakes |
| 21b. | Spray |
| 21c. | Gas |
| 22. | Pads (Canvas Loading) |
| 23. | Pads (Excelsior Wrapping) |
| 24. | Paper Packing Material |
| 25. | Paper (Tar) |
| 26. | Partitions (Steel) |
| 27. | Piano Derricks |
| 28. | Printing (Warehouse Forms, etc.) |
| 29. | Racks (Storage) |
| 29a. | Rug Cleaning Equipment |
| 30. | Saws (Portable Machine) |
| 31. | Stencil Cutting Machines |
| 32. | Trucks (Hand) |
| 32a. | Trucks (Lift) |
| 32b. | Trucks (Refrigerator) |
| 32c. | Trucks (Tiering) |
| 35. | Twine |
| 36. | Vans (Lift) |
| 37. | Work Suits and Uniforms |
| 38. | Wheels (Industrial Truck, Dolly) |

The Automotive Supplies List appears on the next page.



Just fill in the numbers that indicate what you intend buying and also your full name and address. Use (Unlisted Materials) line for products we have not included.

DISTRIBUTION AND WAREHOUSING

249 West 39th Street
New York, N. Y.

Gentlemen:

WE ARE NOW DEFINITELY IN THE MARKET TO BUY THE FOLLOWING ITEMS. PLEASE HAVE MANUFACTURERS WRITE US.

(Supply Numbers)

Unlisted Materials

Company

Address

City State

By Title

Note—[No attention will be given requests that are not signed by an officer of the company].

AUTOMOTIVE SUPPLIES

No.	Product	No.	Product	No.	Product
40.	Air Cleaners, Engine	63.	Cutters, Brake Lining	88.	Lifts, Air
41.	Ammeters	64.	Doors, Garage	89.	Magnetos
42.	Aprons	65.	Drums, Brake	90.	Mufflers, Exhaust
43.	Armatures	66.	Engines	91.	Oil Cleaners, Engine
44.	Attachments, 6-wheel	67.	Fenders	92.	Oil Reclaimers
45.	Bands, Brake	68.	Fire Extinguishers	93.	Paint Removers
46.	Batteries	68a.	Flares	94.	Pullers, Gear & Wheel
47.	Battery Chargers	69.	Gages, Cylinder	95.	Refacers, Valve
48.	Bearings (Size and unit used for)	70.	Gages, Tire Pressure	96.	Shock Absorbers
49.	Bins, Storage	71.	Gages, Wheel & Axle Aligning	96a.	Signals (Truck)
50.	Blocks or Hoists, Chain	72.	Gears, Timing	97.	Sprayers, Paint
51.	Bodies, Armored	73.	Glass, Bullet-proof	98.	Tools, Body & Fender
52.	Bodies, Lift Vans	74.	Glass, Non-shatter	99.	Tools, Spring Shackle
53.	Bodies, Refrigerated	75.	Governors, Engine	100.	Tools, Tire Spreading
54.	Bodies, Truck	76.	Guides, Valve	101.	Tools, Valve Grinding
54a.	Bodies, Moving Van	77.	Guns, Grease	102.	Tools, Valve Seat Renewing
55.	Brake Relining Equipment	78.	Guns, Wash Spray	103.	Trailers
55a.	Cabs, Armored	79.	Heaters, Truck Cab	103a.	Trailers, Merchandise Display
55b.	Cabs, Wood	80.	Heaters, Garage	104.	Transfers, Decalcomania
56.	Chains, Timing	81.	Heaters, Windshield	104a.	Trucks, Gas Motor
57.	Cleaners, Air	82.	Hoists	104b.	Trucks, Electric
58.	Coils, Ignition	83.	Hub Odometers	105.	Valves, Engine
59.	Compressors, Air	84.	Impellers, Waterpump	106.	Washers, Water, Steam & Air
60.	Crankshafts	85.	Jacks, Garage	107.	Wheels, Metal
61.	Creepers, Repair	86.	Joints, Universal	108.	Wheels, Wood
62.	Cushions, Seat	87.	Lifts, Hydraulic	109.	Wheels, Disk
				110.	Wheels, Fifth

Listings of Warehouse Supplies Appear on Preceding Page

Space for noting the information needed on products to be purchased appears on the opposite side of this page.

Note by number the particular class of warehouse or automotive product desired. This coupon will bring you the catalogs, prices, etc., of the different manufacturers of these products.

If the material you wish is not listed, then write its name out in the space allotted for unlisted materials.

DISTRIBUTION and WAREHOUSING

WHERE TO BUY



The purpose of this department each month is to keep you informed of all products, supplies, etc., that you normally use in your business plus new products that are from time to time placed on the market.

We ask that you refer to the "Where-to-Buy" department and keep posted on the new, as well as the old firms whose aim it is to help you

save and earn more in the operation of your business. Should you not find listed or advertised in this "Where-to-Buy" department the product you wish to purchase, please write us and we will be glad to send you the makers name and address.

Our desire is to serve you in every way we can.



DISTRIBUTION AND WAREHOUSING

The Business Paper of the Warehouse Industry

249 West 39th Street
New York

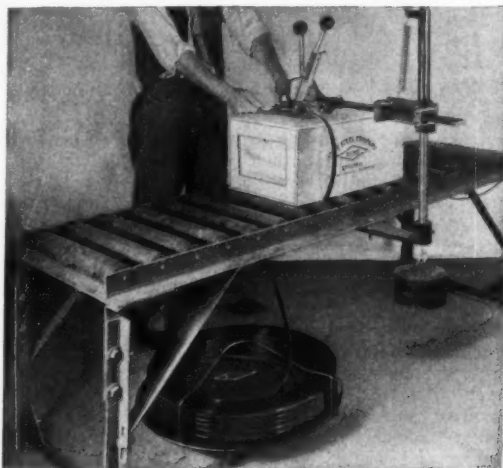
WHAT'S NEW COLUMN

Acme Strap

Retainer

MANY firms which use steel strapping to reinforce boxes and packages find a need of equipment which will not take space on strapping tables.

Acme offers to solve this problem with a new strap retainer



—a steel pan which, by means of casters, is rolled under the table or conveyor where it is entirely out of the way, and yet where the coil of strapping is always "on tap," lying horizontally on this tray, which is only 24½ inches in diameter and 9½ inches in height.

Drill Stand Has Many Uses

THE new Black & Decker No. 7 bench drill stand converts portable electric drills into powerful drill presses for heavy-duty and extremely accurate work.

Four-to-one leverage on the feed handle enables the operator to exert tremendous pressure on the work.

The stand accommodates a ¼-inch special drill, a ¼-inch heavy-duty drill, and a 5/16-inch drill.

WHERE TO BUY

BODIES (Van)

Burch Body Co.; Rockford, Mich.
Cook Wagon Works, Inc., A. E.; 77 E. North St., Buffalo, N. Y.
Donigan & Nielson; 743-747 Third Ave., Brooklyn, N. Y.
Gerstenslager Co.; Wooster, Ohio.
Guedelhoefer Wagon Co., John; 202 Kentucky Ave., Indianapolis, Ind.
Haskelke Mfg. Corp.; 208 W. Washington St., Chicago, Ill.
Met-L-Wood Corp.; 6765 W. 65th St., Chicago, Ill.
Proctor-Keefe Body Co.; 7741 Dix Ave., Detroit, Mich.
Rolloff, Inc., Kendall Square, Boston, Mass.
Schaefer Wagon Co., Gustav; 4168 Lorain Ave., Cleveland, Ohio.



*A Good Chassis
Deserves
a Good
Body*

*Select the Only Exclusive Van Body Builders
in the United States*

THE GERSTENSLAGER CO.
Pioneer Builders of Aluminum Vans
WOOSTER, OHIO
Now Celebrating Our 75th Birthday

INCREASE SHIPPING FLOOR CAPACITY

**MAKE EXTRA TRIPS WITH
TRUCKS YOU HAVE NOW**

— BY USING —

**"ROLOFF" DEMOUNTABLE
BODIES**

ASK US HOW

ROLOFF, INC.
KENDALL SQUARE, BOSTON, MASS.

BOXES, (Moving)

Anderson Box & Basket Co., Drawer No. 10, Audubon District, Henderson, Ky.
Byrnes, Inc., W. L.; 446-448 E. 134th St., New York, N. Y. (Piano)
Eclipse Box & Lumber Co.; 18-20 Wooster St., New York, N. Y.
Lewis Co., G. B.; Watertown, Wis.
Miami Mfg. Co.; Peru, Ind.

BOX STRAPPING (Machines and Supplies)

Acme Steel Goods Co.; 2896 Archer Ave., Chicago, Ill.
Cary Products Co., Inc.; 126 Nassau St., Brooklyn, N. Y.
Harvey Spring & Forging Co.; Racine, Wis.
Signode Steel Strapping Co.; 2600-2620 N. Western Ave., Chicago, Ill.
Stanley Works; Grove Hill & Lake St., New Britain, Conn.

BRINE

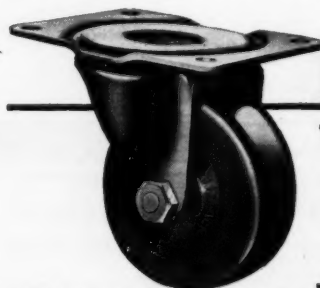
Solvay Sales Corp.; 61 Broadway, New York, N. Y.

CARPET CLEANING EQUIPMENT

American Laundry Mch. Co.; Norwood Sta., Cincinnati, Ohio.
Chief Mfg. Co.; 806 Beecher St., Indianapolis, Ind. (Beaters, stationary.)
Cleveland Rug Cleaning Mch. Co.; East 55th St. & Erie R.R., Cleveland, Ohio.
Electric Rotary Mch. Co.; 3246 W. Lake St., Chicago, Ill.
Kent Co., Inc.; 542 Dominick St., Rome, N. Y. (Shampooing equipment.)
Superior Rug Mch. Co.; 2358 Ogden Ave., Chicago, Ill.
United Vacuum Appliance Corp.; Dept. IX, Twelfth St. & Columbia Ave., Connersville, Ind.

CASTERS (Truck)

American Caster Co.; P. O. Box 524, Hamilton, Ohio.
Bassick Co.; 38 Austin St., Bridgeport, Conn.
Bond Foundry & Mch. Co.; Mannheim, Lancaster County, Pa.
Clark Co., George P.; 4 Canal St., Windsor Locks, Conn.
Colson Co.; Box 550, Elyria, Ohio.
(See advertisement elsewhere in this issue.)
Darnell Corp., Ltd.; 3517 E. 11th St., Long Beach, Cal.
Divine Bros.; 101 Whitesboro St., Utica, N. Y.
Fairbanks Co.; 393-399 Lafayette St., New York, N. Y.
Hamilton Caster & Mfg. Co.; Hamilton, Ohio.
Lansing Co.; 602 Cedar St., Lansing, Mich.
Menasha Wood Split Pulley Co.; P. O. Box No. J, Menasha, Wis.
New Britain Mch. Co.; 140 Chestnut St., New Britain, Conn.
Nutting Truck Co.; 252 W. Kinzie St., Chicago, Ill.
Payson Mfg. Co.; 2920 Jackson Blvd., Chicago, Ill.
Phoenix Caster Co.; Hamilton, Ohio.
Saginaw Stamping & Tool Co.; Saginaw, Mich.
Service Caster & Truck Co.; 517 N. Abbon St., Albion, Mich.
Sippel Co., Wm. H.; Dept. D-W, South Bend, Ind.
Tucker & Dorsey Mfg. Co.; Dept. D. W., S. State & Bates St., Indianapolis, Ind.



No. 3616 or 3619 steel ball bearing swivel with Atlasite or Baco composition wheels.
THE IDEAL DOLLIE CASTERS

Bassick TRUCK CASTERS

Over 456 sizes and types, from 2" to 10" diameter wheels—for every class of service.

THE BASSICK
COMPANY
Bridgeport Connecticut

CLOCKS (Time and Watchmen's)

Detex Watchclock Corp.; 4147 E. Ravenswood Ave., Chicago, Ill. (Watchmen's only)
Simplex Time Recorder Co.; Lincoln Blvd., Gardner, Mass.
Stromberg Elec. Co.; 223 W. Erie St., Chicago, Ill. (Time only)

CONTAINERS (Shipping)

Bird & Son, Inc.; Mill St., East Walpole, Mass.
Hummel & Downing; Milwaukee, Wis.
King Stge. Wshse., Inc.; Erie Blvd. at S. West St., Syracuse, N. Y.
Lewis Co., G. B.; Watertown, Wis.

CONVEYORS

Alvey-Ferguson Co.; 75 Bisney Ave., Cincinnati, Ohio. (Gravity)
Alvey Mch. Co.; 3200 S. Broadway, St. Louis, Mo. (Portable, power and gravity)
Bartlett & Snow Co., C. O.; 6218 Harvard Ave., Cleveland, Ohio.
Rodinson Mfg. Co.; 4401 San Bruno Ave., San Francisco, Cal. (Portable and gravity)
Clark Tractor Co.; Battle Creek, Mich.
Jeffrey Mfg. Co.; 989 N. Fourth St., Columbus, Ohio.
Link-Belt Co.; 300 W. Pershing Rd., Chicago, Ill. (Portable and gravity)
McKinney-Harrington Conveyor Co.; North Chicago, Ill. (Portable and stationary)
Otis Elevator Co.; 26th St. and 11th Ave., New York, N. Y. (Gravity)
Standard Conveyor Co.; Dept. 12, 315 Second Ave., N. W., North St. Paul, Minn. (Portable, power and gravity)

CORDAGE

Pilcher-Hamilton-Daily Co.; 348 N. Dearborn St., Chicago, Ill.
Powers & Co.; 26th & Reed Sts., Philadelphia, Pa. (Flat)
(See advertisement elsewhere in this issue.)

COVERS (Paper Furniture)

Ace Paper Co., Inc.; 127 Bleeker St., New York, N. Y.
Pilcher-Hamilton-Daily Co.; 348 N. Dearborn St., Chicago, Ill.

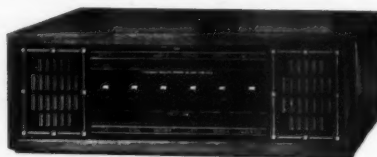
Intra-Communicating System for Offices

DESIGNED for warehouses and motor freight offices to save time of the executives and department heads when communication becomes necessary. Gives direct private lines for the establishment of instant automatic contact.

Is equipped with a clear-toned loud speaker and a highly sensitive long range microphone and embodies every convenience for effortless voice communication.

To originate or answer calls, one flicks a key and talks. Incoming calls are identified, before answering, by a visual signal which appears over the name of the person calling. A simple off-and-on switch controls the call buzzer to suit one's convenience. An ear-piece receiver may be used to silence automatically the loud speaker when privacy is desired.

Permits contact with any department, separately or together, in connection with long distance and local calls for



information without moving from the desk or sending messengers or rushing for another telephone.

Delays are eliminated, call-backs are rarely necessary, and telephone expense is reduced accordingly. In addition, the switchboard is freed of inter-office calls and cleared for incoming and outgoing calls.

Should the person called be away from his desk, a signal will register the call, notifying, upon his return, him to communicate.

Keys connecting to the executive sets have associated visual signals which enables the executive to have the right of way over all other conversation. For automatic memoranda of unanswered calls this visual signal remains in sight until the call is answered.

Telematic systems generally consist of one or more executive Telematics and the required number of "Inter-Comms." for other members of the organization. Both are shown herewith.

Installation is made and serviced by the Dictograph Products Co. and the complete system is guaranteed against inherent defects for ten years.

Telafire Low-Cost Fire Alarm

A NEW low-cost fire alarm unit, the Telafire, has been brought out by G-M Laboratories, Inc., for use with the conventional electrical alarm systems such as bells, buzzers, red lights, etc. Simplicity of operation and ease of installation are declared to make it particularly adapted to use in warehouses and truck garages.

An important feature is the mercury contact tube which completely protects the contacts from corrosion, dust, dirt, grease and other accumulations which could easily prevent



operation of low-voltage devices of this character. This tube is air tight with two contact wires entering through the upper end and a quantity of mercury in the lower end. Under the action of heat the movable arm on which the tube is mounted is released, permitting one end to drop. As it drops, the mercury flows around the wires, making an electrical connection and completing the alarm circuit.

This device is normally adjusted for operation at approximately 135 degrees Fahrenheit. It is three inches in diameter and finished in red enamel.

To conserve battery power it is designed for open circuit use, although it can readily be supplied for closed circuit installations. Where desired, a complete alarm cabinet is available for battery or for 110-volt, 60-cycle operation. Any number of Telafires can be connected on one alarm system. The price each is \$1.25.

Pyrene Offers 2-Quart Fire-Extinguisher

A NEW Pyrene vaporizing liquid fire-extinguisher which is discharged by air pressure and delivers a fan-shaped spray as well as a solid stream has just been announced.

This extinguisher, known as the 2-quart pressure-type, is recommended for incipient fires in all classes of material, and especially for flammable liquids and electrical fires. Due to the fact that it is of the pressure-type and has a special combination nozzle, it is designed primarily for use in garages and trucks and around electrical equipment and flammable liquids.

Ruggedly constructed throughout of copper and brass, its top and bottom castings are securely fastened to an inner and outer seamless shell, forming two chambers. The inner holds air under pressure, and the outer contains fire-extinguishing



liquid. To keep cost and weight low, no built-in pump is used; consequently air pressure is renewable at any air line having pressure of 100 pounds or more. The extinguisher is compact, weighs only 16½ pounds fully charged, and is 18 inches high and 5 inches in diameter. It is operated merely by opening the operating valve on the top of the extinguisher and controlling the combination discharge nozzle.

This discharge nozzle is unique in that it produces a solid stream when opened wide, and a fan-shaped spray when opened partially. When nozzle lever is released, it serves as a temporary shut-off. The fan-shaped spray instantly vaporizes the liquid, thereby displacing oxygen and smothering the fire. It is especially valuable where there are well-filled containers having little or no room at the side of the container against which to direct a solid stream to break it up and atomize it.

COVERS (Piano)

Canvas Specialty Co., Inc.; 90 Grand St., New York, N. Y.
(See advertisement elsewhere in this issue.)
Fulton Bag & Cotton Mills; Box 1726, Atlanta, Ga.
(See advertisement elsewhere in this issue.)
Iden Warehouse Supply Co.; 564 Washington Blvd., Chicago, Ill.
New Haven Quilt & Pad Co.; 82-86 Franklin St., New Haven, Conn.
(See advertisement elsewhere in this issue.)
Powers & Co.; 26th & Reed Sts., Philadelphia, Pa.
(See advertisement elsewhere in this issue.)
Self-Lifting Piano Truck Co.; Findlay, Ohio.
(See advertisement elsewhere in this issue.)
Werner Canvas Products Co.; 2 Water St., Brooklyn, N. Y.

COVERS (Truck)

(Tarpaulins)

Baker-Lockwood Mfg. Co., Inc.; McGee Trafficway at 23rd St., Kansas City, Mo.
Breen, Wm. H.; 219 Rutherford Ave., Charlestown, Mass.
Carpenter & Co.; Geo. B.; 440 N. Wells St., Chicago, Ill.
Channon Co., H.; 149 N. Market St., Chicago, Ill.
Des Moines Tent & Awning Co.; 915 Walnut St., Des Moines, Iowa.
Fulton Bag & Cotton Mills; Box 1726, Atlanta, Ga.
(See advertisement elsewhere in this issue.)
Hoegge Co., Inc.; Wm. H.; 133 S. Main St., Los Angeles, Cal.
Hooper & Sons Co.; Wm. E.; 3502 Parkdale St., Baltimore, Md.
Iden Warehouse Supply Co.; 564 Washington Blvd., Chicago, Ill.
Michigan Tent & Awning Co.; 1922 W. Canfield Ave., Detroit, Mich.
Powers & Co.; 26th & Reed Sts., Philadelphia, Pa.
(See advertisement elsewhere in this issue.)
Seattle Tent & Awning Co.; First Ave. & Columbia St., Seattle, Wash.
U. S. Tent & Awning Co.; 707 N. Sangamon St., Chicago, Ill.
The Wagner Awning & Mfg. Co.; 2658 Scranton Road, Cleveland, Ohio.

DOLLIES

Hamilton Caster & Mfg. Co.; Hamilton, Ohio.
Nutting Truck Co.; 252 Kinzie St., Chicago, Ill.
Service Caster & Truck Co.; 517 N. Albion St., Albion, Mich.

DOORS (Elevator and Fire)

California Fpt. Door Co.; 1919 E. 51st St., Los Angeles, Cal. (Fire)
Harris-Preble Door Co.; 228 N. LaSalle St., Chicago, Ill. (Fire)
Kinneer Mfg. Co.; 1270 Fields Ave., Columbus, Ohio. (Fire)
National Refrigerator Co.; 827 Koellin Ave., St. Louis, Mo. (Cold stge.)
Peelle Co., The; Harrison Pl. & Drydock, Brooklyn, N. Y. (Elevator)
Richmond Fpt. Door Co.; N. W. Fourth & Center Sts., Richmond, Ind. (Elev. and fire)
Security Fire & Door Co.; 3044 Lambda Ave., St. Louis, Mo. (Elev. and fire)
Smith Wire & Iron Works, F. P.; Fullerton, Clybourne & Ashland Aves., Chicago, Ill. (Fire)
Variety Mfg. Co.; 2955 Carroll Ave., Chicago, Ill. (Cold stge. and fire)
Vulcan Rail & Const. Co.; Grand St. & Garrison Ave., Maspeth, N. Y. (Fire)

ELEVATORS

Alvey-Ferguson Co., Inc.; 75 Binney Ave., Oakley, Cincinnati, Ohio.
Montgomery Elev. Co.; 30 Twentieth St., Moline, Ill. (Passenger and freight)
Otis Elevator Co.; Eleventh Ave. & 26th St., New York, N. Y.
Warsaw Elev. Co.; 216 Fulton St., Warsaw, N. Y. (Passenger and freight)

ELEVATORS (Portable)

Barrett-Cravens Co.; 3264 West 30th St., Chicago, Ill.
Economy Eng. Co.; 2651 W. Van Buren St., Chicago, Ill.
Jeffrey Mfg. Co.; 989 N. Fourth St., Columbus, Ohio.
Lewis-Shepard Co.; 124 Walnut St., Watertown Sta., Boston, Mass.
Link-Belt Co.; 2045 Hunting Park Ave., Philadelphia, Pa.

EXCELSIOR

Allen, Inc.; Charles M.; Fulton, N. Y.
American Excelsior Corp.; 1000-1020 N. Halsted St., Chicago, Ill.
Orange Mfg. Co.; Edand, N. C.
Phillips Excelsior Co.; Chattanooga, Tenn.
Sheboygan Pad Co.; 1301-5 Erie Ave., Sheboygan, Wis.

EXTINGUISHERS (Fire)

American-La France and Foamite Corp.; 100 E. La France St., Elmira, N. Y.
Elkhart Brass Mfg. Co.; 1302 W. Beardsley Ave., Elkhart, Ind.
Oil Conservation Eng. Co.; 877 Addison Rd., Cleveland, Ohio.
Pacific Fire Extinguisher Co.; 142 9th St., San Francisco, Cal.
Pyrene Mfg. Co.; 560 Belmont Ave., Newark, N. J.
Safety Fire Extinguisher Co.; 290 Seventh Ave., New York, N. Y.
Solvay Sales Corp.; 61 Broadway, New York, N. Y.

FLOOR REPAIRING MATERIAL

Euclid Chemical Co.; 7012 Euclid Ave., Cleveland, Ohio.
Master Builders Co.; 7016 Euclid Ave., Cleveland, Ohio.

FUMIGATING EQUIPMENT

Haskelite Mfg. Corp.; 208 W. Washington St., Chicago, Ill.

HOISTS (Chain and Electric)

Alloy Steel & Metals, Inc.; 1862 East 65th St., Los Angeles, Calif. (5 Ton Hand Hoist)
Box Crane & Hoist Corp.; Trenton Ave. & E. Ontario St., Philadelphia. (Elec.)
Chisholm-Moore Hoist Corp.; 4055 Lakeside Ave., Cleveland, Ohio. (Chain)
Harnischfeger Corp.; 4401 West National Ave., Milwaukee, Wis. (Chain and elec.)
Harrington Co.; Callowhill & 17th St., Philadelphia, Pa. (Chain and elec.)
Hobbs Co.; Clinton E.; 203 Chelsea St., Everett Sta., Boston, Mass. (Chain and elec.)
Reading Chain & Block Corp.; 2100 Adams St., Reading, Pa. (Chain and elec.)
Roper Crane & Hoist Works, Inc.; 1776 N. Tenth St., Reading, Pa. (Chain)
Wright Mfg. Co.; York, Pa. (Chain)
Yale & Towne Mfg. Co.; 4590 Tacony St., Philadelphia, Pa. (Chain and elec.)

INSECTICIDES

Barrett Co.; 40 Rector St., New York, N. Y.
(See advertisement elsewhere in this issue.)
Carbide & Carbon Chemicals Corp.; 30 E. 42nd St., New York, N. Y. (Gas)
Cenol Co.; Dept. M.; 4250-56 No. Crawford Ave., Chicago, Ill.
Enos Chemical Co.; 2490 Indiana Ave., Chicago, Ill.
Grassell Chemical Co.; Guardian Bldg., Cleveland, Ohio.
Gretsch & Co., Inc.; Ralph, 1150 Broadway, New York, N. Y.
(See advertisement elsewhere in this issue.)
Michigan Alkali Co.; 60 E. 42nd St., New York, N. Y.
Midway Chemical Co.; 5235-5259 W. 65th St., Chicago, Ill.
National Home Sanitation Co.; Dept. A.A.; 627 First Ave., North, Minneapolis, Minn.
Potter Mfg. Co., Inc.; Dept. H., 12 Henry St., Bloomfield, N. J.
White Tar Co.; Dept. W., Belleville Turnpike, Kearny, N. J.
(See advertisement elsewhere in this issue.)
Wisard, Inc.; 5235-5259 W. 65th St., Chicago, Ill.

NAPHTHALENE FLAKES

Barrett Co., 40 Rector St., New York, N. Y.
(See advertisement elsewhere in this issue)
Gretsch & Co., Inc., 1150 Broadway, New York, N. Y.
White Tar Co., Dept. W., Belleville Turnpike, Kearny, N. J.
(See advertisement elsewhere in this issue.)

MOTH-CRAFT PRODUCTS

give safe, sure and inexpensive insurance against damage by moths



NAPHTHALENE FLAKES and PINE TAR PAPER

24 hour shipment and personal attention to every order.

Write or phone
RALPH GRETSCH & CO., INC. 1150 Broadway, N. Y. C.
Phone Ashland 4-9417

PADS (Canvas Loading)

Canvas Specialty Co., Inc., 90 Grand St., New York, N. Y.
Fulton Bag & Cotton Mills; Box 1726, Atlanta, Ga.
Gotch Co., Walter M., 630 W. Adams St., Chicago, Ill.
Idem Warehouse Supply Co., 664 Washington Blvd., Chicago, Ill.
Louisville Bedding Co., Preston & Market Sts., Louisville, Ky.
Michigan Tent & Awning Co., 1922 W. Canfield Ave., Detroit, Mich.
New Haven Quilt & Pad Co., 82-86 Franklin St., New Haven, Conn.
(See advertisement on page of this issue)
Powers & Co., 26th & Reed Sts., Philadelphia, Pa.
(See advertisement on page of this issue)
Seattle Tent & Awning Co., First Ave. & Columbia St., Seattle, Wash.
Wagner Awning & Mfg. Co., 2658 Scranton Rd., Cleveland, Ohio.

PADS (Excelsior Wrapping)

American Excelsior Corp., 1000-1020 N. Halsted St., Chicago, Ill.
Dale Bros. Excelsior Pad Co., 1659 Plainfield Ave., N. E., Grand Rapids, Mich.
Indiana Excelsior Co., S. Keystone Ave. & Belt R.R., Indianapolis, Ind.
Pioneer Paper Stock Co., 448 W. Ohio St., Chicago, Ill.
Sheboygan Pad Co., 1801-5 Erie Ave., Sheboygan, Wis.
Washington Excelsior & Mfg. Co., Ft. of Main St., Seattle, Wash.

IRON HORSE



Reg. U. S. Pat. Off.

FURNITURE PADS

Always improving values through nineteen years of honest service.

Cut sizes 36 x 72, 54 x 72, 72 x 72, 80 x 72.

Write for prices and samples.

Van Linings
Grand Covers Tietape

CANVAS SPECIALTY CO., Inc. 90 Grand St., N.Y.C.

Fulco Furniture PADS

Extra-quality Furniture Pads, easily identified by the brilliant gift-edge webbing at ends. Webbing gives longer life. Generous thickness assures perfect protection. Fiber positively will not lump.

Write now for complete information, prices and terms on the New 1935 line of Fulco Furniture Pads, Radio Covers, Tarpsaulins, Burlaps, etc. Address nearest plant or branch listed below.

Fulton Bag & Cotton Mills

Manufacturers Since 1870

Atlanta St. Louis Dallas
Minneapolis Brooklyn New Orleans Kansas City, Kan.

"Wrapped in Rubber" a New Process

"WRAPPED in rubber" may soon take its place alongside of "wrapped in cellophane" in the shipment and storage of articles. A Michigan company is about to put on the market a non-inflammable liquid protective coating which can be handled as is paint and which, in a few minutes of exposure to the air after application, turns into live rubber.

To be marketed under the name "Kelsanite," the material has several rather remarkable characteristics. It can be applied with a brush, it can be sprayed on, or articles can be dipped in it. It will adhere to any surface forming a complete protective coating. Yet it is as easily removable as a cellophane wrapper when it has performed its function.

Inasmuch as no known chemical will dissolve rubber, and as rubber is as waterproof and air tight as any material known, it will provide complete protection against the action of any known element.

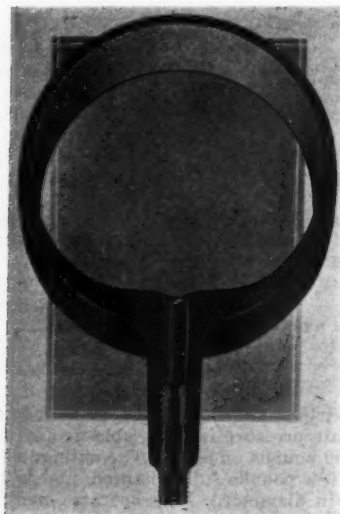
Furthermore, because the coating is elastic the natural cushioning action would provide a protection against accidental scratches or nicks in handling, thus making it adaptable to the protection of manufactured articles having finely finished surfaces.

Another advantage claimed is that the article to which it is to be applied does not have to be completely clean and dry. The coating itself will absorb or pick up any loose dirt, moisture, etc., on the surface of the article. When the coating is finally stripped off, all such foreign material will, it is declared, come off with the coating, leaving the article clean in every respect.

Pinch-Proof, Leak-Proof Tube by Firestone

A NEW black tube which is claimed to be pinch-proof and leak-proof, thus increasing tire life 25 per cent through prevention of under-inflation, has been developed by Firestone.

It is pinch-proof because it is made of a tough black rubber compound similar to tire tread stock, and because it is formed



with an extra-thick base. The tough stock and thick base not only prevent pinching but resist cutting and wear, giving the tube far longer life.

Two features make the tube leak-proof. One is its specially compounded silver lining, which seals the rubber against air loss. The other is an all-rubber valve stem vulcanized into the tube as an inseparable unit. This valve construction also adds strength to the valve base and to the tube as a whole.

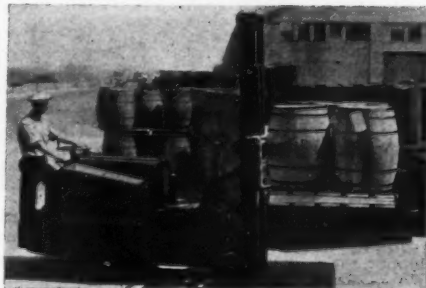
Elwell-Parker Lift Truck

THE method of stacking and loading bales and boxes by machine effects not only a great saving in storage room but in manual labor.

In addition to these economies, the Elwell-Parker offers, in its new Type GER lift truck, a lessened operative cost, inasmuch as this new model has a gas engine instead of an electric motor.

The Elwell-Parker pallet system, as a whole, comprises tiering fork trucks for loading large containers, together with wooden pallets for carrying loads. To insure neat, undisturbed delivery without manual labor, the inexpensive pallets can be shipped with the loads and discarded at destination.

The new heavily-powered machine with its transmission safety-lock is especially designed for warehouses which, because of steep inclines, have not been able to make use of the



pallet system. The safety-lock holds truck to ramp when it is necessary to stop on an incline.

The truck itself, with rated capacity of 4,000 to 7,000 pounds and a travel speed of 6 to 12 miles an hour, is said to be exceptionally powerful for climbing ramps. The power-plant is a 4-cylinder engine of standard make, 4 by 4½, developing 33 brake horsepower when operating at normal speed of 1,250 r.p.m.

The truck in action may be seen in the accompanying illustrations. Its design provides the use of a ram—two or more forks with attachments which qualify it for picking up loads. The forks are detachable and adjustable to suit each load. Movement of the forks, either up or down, can be stopped instantly.

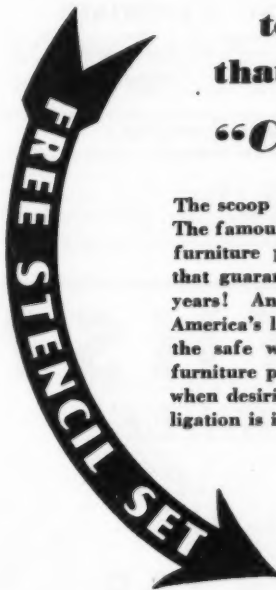
BONDED DREADNAUGHT

3-Inch Square Stitched FURNITURE PADS

Guaranteed for 3 Years

**to Assure You
that Dreadnaughts
"Can Take It"**

The scoop of the furniture pad industry! The famous Dreadnaught Square Stitched furniture pads now sold with a BOND that guarantees Dreadnaught Pads for 3 years! And the guarantee is backed by America's largest pad manufacturer. It's the safe way and the only way to buy furniture pads. Do not hesitate to write when desiring more information. No obligation is incurred.



With Each Purchase of 1 Dozen Pads or More

SEND IN YOUR ORDER NOW!

**NEW HAVEN QUILT & PAD CO.
NEW HAVEN, CONN.**

_____ Doz. 36 x 72 In. @ \$12.50 Doz.

_____ Doz. 54 x 72 In. @ \$18.50 Doz.

_____ Doz. 72 x 80 In. @ \$23.50 Doz.

TERMS: 2% Cash, 10 Days, Net 30 days on approved credit (or 3% C.O.D.) F.O.B. New Haven, Conn. Choice of either khaki, green or blue best quality drill covering.

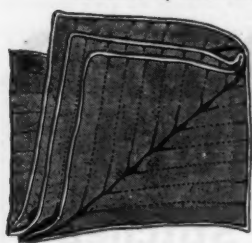
Name

Address

City State

Please Ship Via

PADS (Canvas Loading)—Continued



POWCO FURNITURE PADS

CUT SIZE
72 x 36"
72 x 54"
72 x 72"
72 x 80"

Quality pads, extra heavy cover, bound on all four sides, which means twice the service; lock-stitched, not chain stitched, prevents raveling.

Filler laid one way, stitched the opposite, prevents "thinning out" or "lumping." Made with cotton filler, gives extra thickness and permanent body.

Furniture Tape, 1½" wide, Rolls of 27 yards.

Tarpaulins
Truck Covers
Awnings

POWERS & CO. REED ST. 25TH TO 26TH
PHILADELPHIA

PAPER PACKING MATERIALS

Ace Paper Co., Inc.: 127 Bleecker St., New York, N. Y.
Jiffy Pad & Excelsior Co.: 45 N. Washington St., Boston, Mass.
Kimberly Clark Co.: 8 S. Michigan Ave., Chicago, Ill.
Pitche-Hamilton-Daily Co.: 348 N. Dearborn St., Chicago, Ill.
Pioneer Paper Stock Co.: 448 W. Ohio St., Chicago, Ill.

PAPER (Moth Proofing)

White Tar Co.: Dept. W., Belleville Turnpike, Kearny, N. J.

PAPER (Tar)

Gretsch & Co., Inc., Ralph: 1150 Broadway, New York, N. Y.
(See advertisement elsewhere in this issue)
White Tar Co.: Dept. W., Belleville Turnpike, Kearny, N. J.

MOTHS?

NO SIR-REE!



Not when
you use



WHITE TAR

NAPHTHALENE

FLAKES or BALLS

... they're made of the finest quality pure refined white naphthalene—and backed by nearly fifty years' experience in the manufacture of moth preventives. Simple to use—just sprinkle freely in any tight room. Inexpensive—whether you buy in barrels, cartons, or individual boxes.

PINE TAR PAPER

Solves the problem of protecting rugs, carpets and draperies from moths and dirt. And it's available in sizes to meet every requirement.

Send for Prices and Full Information Today!

The WHITE TAR COMPANY of NEW JERSEY, Inc.

(A Subsidiary of the Koppers Co.)

Belleville Turnpike

Kearny, N. J.

PARTITIONS (Steel)

Edwards Mfg. Co.: 529 Eggleston Ave., Cincinnati, Ohio.
Hanserman Co., E. F.: 8991 Grant Ave., Cleveland, Ohio.
Mills Co., The: Wayside Rd. & Nickel Plate R. R., Cleveland, Ohio.
Page Fence Assn.: Dept. 2, 520 N. Michigan Ave., Chicago, Ill.
Phoenix Wire Works: 1940 E. Kirby Ave., Detroit, Mich.

Elevation of load is achieved by means of a cylinder which receives oil from a geared hydraulic pump direct-driven from truck motor. A separate hydraulic ram tilts the upright forward and backward by means of levers. It also receives its power from the pressure pumps.

Thus it is easy to pick up large crates and rolls from the floor and stack them without the operator leaving his seat in back of the engine.

Link-Belt Offers Six

Top Icing Machines

TOP icing, or the cooling of carloads of crated vegetables with pulverized ice particles blown through a hose, is recommended over the older methods of block or bunker icing for ease, safety, economy, and efficiency. The operator, spraying the snow ice over the top of the load, can stand in the doorway and reach all corners of the car without moving. It is not necessary that he climb over the load, thereby disturbing it or breaking packages and crates.

The increasing use of this method of cooling green vegetables has encouraged Link-Belt to develop six new machines for pulverizing and spraying ice over car and truck loads. These machines are six different adaptations of the portable ice-crusher and slinger for different types of cars and trucks. The general equipment includes an ice slicer operated by a



heavy-powered gasoline engine. Thus a large-sized ice-cake is divided into four sections, each of which is thrown in turn into the hopper to be crushed into small cubes. The pulverized ice is then forced by a powerful blower through a large rubber hose about 6 inches in diameter which is passed through the doorway of the car. The patented cup-shaped sprayer on the hose directs the ice evenly over the car contents so that the entire load holds a fine uniform layer which shifts down between the crates, giving complete refrigeration to the entire carload and preventing center heating. The packages are held firmly in place by these particles and the danger of breaking is thus lessened.

These machines are portable and can be moved on trucks from yard to yard and car to car. Any of the standard machines has a capacity of up to 20 tons of crushed ice an hour. Each is equipped with a telescoping discharge pipe with rubber nozzle (overall length: 9 feet minimum, 12 feet extended); or, if desired, a 10-foot reinforced rubber hose is furnished.

The machine here illustrated is type No. 6, crusher and slinger combined, on an integral steel base, ready for mounting on a truck; furnished without driving unit, but arranged to be driven from a separate gasoline engine or electric motor, or from a power takeoff on the truck, or from the truck rear wheels. The illustration shows the machine mounted on a truck parked beside a refrigerator car of green peas. The operator is re-icing the load.

G. M. Dual Truck Axle

for 2-3-Ton Range

INTRODUCTION of a dual performance axle is announced by the General Motors Truck Co. as optional on the T-13 trucks in the 2-to-3-ton range.

This axle permits a lower gear ratio and more pulling power, enabling drivers to take heavy loads up steep hills over rough roads with less effort. Also it permits a higher gear ratio than is common in trucks, thus enabling drivers to travel at faster speeds on level roads or when the truck is empty.

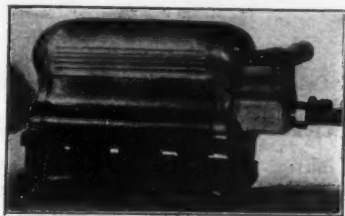
The dual performance axle and standard 4-speed transmission provide eight forward and two reverse speeds, a gear ratio properly spaced for every load and every road condition.

The special design of this axle provides for a simple planetary reduction gear assembled between the oversize bevel gear and the differential and controlled by a shift lever installed in the cab. A simple movement of this lever enables driver to change instantly—under any operating condition—to low or high speed range. Dual performance results in decreased strain on both driver and vehicle.

Speed-Bloc Sander

THE Speed-Bloc Sander claims an improvement, in uniformity, quality, and speed of production, over hand methods of sanding. Uniformity of surface and pressure, which the hand cannot effect entirely, produces full contact of the abrasive with the product.

A rubber fabric bridged construction sanding pad makes this machine flexible and therefore adaptable to curved as well as flat surfaces. The backward and forward, or reciprocating, motion of hand-sanding is duplicated in shorter strokes—thus preventing scratching of surface with the abrasive. Any loosened particles are almost instantly cast out of the path of abrasion. Irregularities of fabrication are smoothed out and blended with the remainder of the surface. The speed of oscillation is 3000 per minute, and the stroke of the sanding pad 1½ inches.



This improved stroke has adapted the machine to sanding curved surfaces and to finishing metal, wood, and composition surfaces in products normally requiring hand labor with sandpaper. With stainless steel products also, the improved stroke of the machine is said to achieve satin or dull finishes rather than highly polished surfaces.

The machine enables economy in production. A coarser abrasive can be used and a saving of 10 per cent to 20 per cent in abrasives is claimed, and saving of 20 per cent to 50 per cent in time with the flexible pad sander as compared to hand methods.

The machine is air-driven, operating on 60 pounds of air, using approximately 6 cubic feet of air a minute under load. It is equipped with a water connection, a series of openings on each side of the machine allowing a spray which may be easily adjusted to the need of the work. The Sterling is 7 inches long, 4¾ inches high, 3¾ inches wide, and weighs 7 pounds.

PIANO DERRICKS AND TRUCKS

Fairbanks Co.; 393-399 Lafayette St., New York, N. Y.
Iden Warehouse Supply Co.; 564 Washington Blvd., Chicago, Ill.
Self-Lifting Piano Truck Co.; Findlay, Ohio.
(See advertisement elsewhere in this issue)

PRINTING

Economy Printing Service; 341 East 150 St., New York City, N. Y.

PRINTING

WAREHOUSE PRINTING FORMS OF EVERY DESCRIPTION

- Careful household storage warehousemen use the Economy Printing Service forms to aid them in operating their business legally and efficiently.
- The Economy Printing Service will gladly send you samples and quotations on request and will gladly quote prices on the forms you are now using.
- Our service and estimates will cover all of your printing needs.

ECONOMY PRINTING SERVICE
341 EAST 150TH ST. NEW YORK CITY

RACKS (Storage)

Barrett-Cravens Co.; 3264 West 30th St., Chicago, Ill.
Berger Mfg. Co.; 1039 Belden Ave., N. E., Canton, Ohio.
Lyon-Metal Products, Inc.; Drawer 450, Aurora, Ill.
Medart Mfg. Co., Fred; Pontiac & DeKalb Sts., St. Louis, Mo.

RECORDERS (Motor Truck)

Electric Tachometer Corp.; Broad & Spring Garden Sts., Philadelphia, Pa.
Ohmer Fare Register Co.; 740 Bolander St., Dayton, Ohio.
Service Recorder Co.; 1422 Euclid Ave., Cleveland, Ohio.
Stewart-Warner Speedometer Corp.; Diversey Blvd., Chicago, Ill.
U. S. Fare Recording Co., Inc.; 511 W. 54th St., New York, N. Y.
Veeder Mfg. Co.; 54 Sargent St., Hartford, Conn.

REFRIGERATION (Truck Body)

B & J Trailer Co., 3913 Michigan Ave., Chicago, Ill.
(See advertisement elsewhere in this issue)
Fruehauf Trailer Co., 10940 Harper Ave., Detroit, Mich.
(See advertisement elsewhere in this issue)
International Carbonic, Inc., 60 East 42nd St., N. Y. (Carbon Dioxide)
(See advertisement elsewhere in this issue)
International Harvester Co. of Am., 406 S. Michigan Ave., Chicago, Ill.
(See advertisement elsewhere in this issue)
Liquid Carbonic Co., 3100 S. Kedzie Ave., Chicago, Ill. (Carbon Dioxide)
(See advertisement elsewhere in this issue)
Mack Trucks, Inc., 25 Broadway, New York, N. Y.
(See advertisement elsewhere in this issue)
Reo Motor Car Co., 1331 S. Washington Ave., Lansing, Mich.
(See advertisement elsewhere in this issue)

SAWS (Portable Machine)

Fairbanks, Morse & Co.; 900 S. Wabash Ave., Chicago, Ill.
Kennedy, Ralph M.; 111 N. Seventh St., Philadelphia, Pa.
Leach Co.; S. Main & Sixth Sts., Oshkosh, Wis.
Lippert Saw Co., E. T.; 605 Lincoln Ave., Minneapolis, Minn.
Onan & Sons, D. W.; 48 Royalton Ave., Minneapolis, Minn.
Skilaw, Inc.; 3310 Elston Ave., Chicago, Ill.
Wallace & Co., J. D.; 134 S. California Ave., Chicago, Ill.

SCALES

Dayton Scale Co.; Dayton, Ohio.
Fairbanks, Morse & Co.; 900 S. Wabash Ave., Chicago, Ill.
Gaston Scale Co.; Beloit, Wis.
International Scale Co.; 270 Broadway, New York, N. Y.
Standard Scale & Supply Co.; 412 First Ave., Pittsburgh, Pa.
Toledo Scale Co.; Toledo, Ohio.

• • • Your advertisement in DISTRIBUTION and WAREHOUSING

Works for you all of the time. Your most valued customer next year, may be the least known of your prospects this year. Business comes from unexpected sources and to reach them all, use "D. and W." regularly. . . . The cost is less than by any other regular means of advertising.

SIGNALS

Turn Signal Corp.; 400 E. Rittenhouse Ave., Phila., Pa.

STENCIL CUTTING MACHINES

Bradley Mfg. Co., A. J.; 101 Beekman St., New York, N. Y.
Diagraph Stencil Mch. Corp.; 2913 Clark Ave., St. Louis, Mo.
Ideal Stencil Mch. Co.; 22 Ideal Block, Belleville, Ill.
Marsh Stencil Mch. Co.; 35 March Bldg., Belleville, Ill.

TIRES (Industrial Truck)

General Tire & Rubber Co.; E. Market St., Akron, Ohio.
Goodrich Rubber Co., B. F.; Akron, Ohio.
(See advertisement elsewhere in this issue.)
Goodyear Tire & Rubber Co.; 7144 E. Market St., Akron, Ohio.

TIRES (Motor Truck)

Firestone Tire & Rubber Co.; So. Main St., Akron, Ohio.
General Tire & Rubber Co.; E. Market St., Akron, Ohio.
Goodrich Rubber Co., B. F.; Akron, Ohio.
(See advertisement elsewhere in this issue.)
Goodyear Tire & Rubber Co.; 7144 E. Market St., Akron, Ohio.
Kelly-Springfield Tire Co.; 405 Lexington Ave., New York, N. Y.
Mohawk Rubber Co.; 1235 Second Ave., Akron, Ohio.
Seiberling Rubber Co.; Akron, Ohio.
United States Rubber Co.; 1790 Broadway, New York, N. Y.

TRAILERS (Motor Truck)

B & J Trailer Co.; 3913 Michigan Ave., Chicago, Ill.
(See advertisement elsewhere in this issue.)
Fruehauf Trailer Co.; 10036 Harper Ave., Detroit, Mich.
(See advertisement elsewhere in this issue.)
General Motors Truck Co.; Pontiac, Mich.
(See advertisement elsewhere in this issue.)
Highway Trailer Co.; Edgerton, Wis.
Stoughton Co.; Stoughton, Wis.
Trailer Co. of America; 51st and Robertson, Cincinnati, Ohio.
Utility Trailer Mfg. Co.; Box 1407, Arcade Station, Los Angeles, Cal.

TRUCK RACKS (For Hand Trucks)

Re-Bo Equipment Co.; 405 Lexington Ave., New York City, N. Y.

TRUCKS (Hand)

American Pulley Co.; 4200 Wissahickon Ave., Philadelphia, Pa.
(All steel stevedore)
Barrett-Cravens Co.; 3264 West 30th St., Chicago, Ill. (Lift, stevedore and platform)
Bodinson Mfg. Co.; 4401 San Bruno Ave., San Francisco, Cal. (Platform)
Chase Fdry. & Mfg. Co.; 2340 Parsons Ave., Columbus, Ohio.
Colson Co.; Box 550, Elyria, Ohio. (Platform and stevedore)
Electric Wheel Co.; Walton Heights, Quincy, Ill. (Platform and stevedore)
Fairbanks Co.; 395-399 Lafayette St., New York, N. Y. (Lift, platform and stevedore)
Globe Vise & Truck Co.; 1451 Front St., N. W., Grand Rapids, Mich.
Hamilton Caster & Mfg. Co.; Hamilton, Ohio.
Howe Chain Co.; 2-30 E. Clay Ave., Muskegon, Mich.
Jarvis & Jarvis, Inc.; 200 S. Main St., Palmer, Mass.
Lansing Co.; 602 Cedar St., Lansing, Mich. (Platform and stevedore)
Lewis-Shepard Co.; 124 Walnut St., Watertown Sta., Boston, Mass. (Lift and stevedore)
Lyon Iron Works, Inc.; Box A, Greene, N. Y. (Lift and platform)
McKinney Mfg. Co.; Liverpool & Metropolitan Sts., Pittsburgh, Pa. (Stevedore)
Marion Malleable Iron Works; Box 689, 928 Miller Ave., Marion, Ind. (Dolly)
Mercury Mfg. Co.; 4148 S. Halsted St., Chicago, Ill.
Norman, Wm. A.; 180 N. Michigan Ave., Chicago, Ill.
Nutting Truck Co.; 252 Kinzie St., Chicago, Ill. (Platform and stevedore)
Saginaw Stamping & Tool Co.; Saginaw, Mich.
Self-Lifting Piano Truck Co.; Findlay, Ohio. (Special piano)
Service Caster & Truck Co.; 617 N. Albion St., Albion, Mich.
Streich & Bro., A.; 318 Eighth St., Oshkosh, Wis.
Tucker & Dorsey Mfg. Co.; Dept. D. W., S. State & Bates Sts., Indianapolis, Ind. (Platform)

TRUCKS (Jack)

Colson Co.; Box 550, Elyria, Ohio.

TRUCKS (Refrigerator)

R & E Appliance Co., Inc.; 208 E. Crawford St., Findlay, Ohio.
Self-Lifting Piano Truck Co.; Findlay, Ohio.

VAULTS (Fumigation)

Haskelite Mfg. Corp.; 208 W. Washington St., Chicago, Ill.

WAREHOUSE FORMS

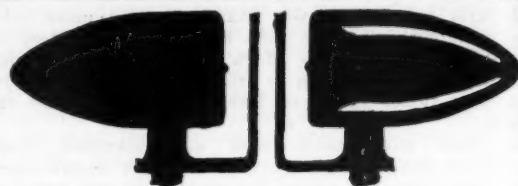
Economy Printing Service; 341 East 150th St., New York City, N. Y.
(See advertisement elsewhere in this issue.)

WHEELS (Industrial Truck)

Divine Bros. Company; 101 Whitesboro St., Utica, N. Y.
Fairbanks Co.; 395-399 Lafayette St., New York, N. Y.

WORK SUITS AND UNIFORMS

Carhartt-Hamilton Cotton Mills; Michigan Ave. & Kent St., Detroit, Mich.
Hart Mfg. Co.; 16 E. Livingston St., Columbus, Ohio.
Hirsch-Weiss Mfg. Co.; 205-209 Burnside St., Portland, Ore.
Isaac and Son, Wm.; 88 Bowery, New York, N. Y.
McDonald Mfg. Co., E. L.; Twelfth & Penn Sts., St. Joseph, Mo.
Motor Suit Mfg. Co.; 302 W. Ninth St., Kansas City, Mo.
Nunnally & McCrea Co.; 104-6 Mitchell St., S. W., Atlanta, Ga.
Oppenheim Bros.; 1107 Broadway, New York, N. Y.
Scott Mfg. Co., Cyrus W.; Houston, Texas.
Star Overall & Uniform Mfg. Corp.; 61-63-65 Taaffe Place, Brooklyn, N. Y.
Strass & Co., Levi; 98 Battery St., San Francisco, Cal.
Waco Garment Mfg. Co.; P. O. Box 184, Waco, Texas.



A paying investment.

Watch for this trademark.

TURN SIGNAL
CORPORATION

400 E. Rittenhouse St., (Germantown) Phila., Pa.



SAVE HALF YOUR HANDLING COSTS

by using the economical Colson Lift Jack System. A single Jack motivates any number of platforms. Loads in storage are readily mobile and much floor handling is eliminated. This system saves investment, saves labor, saves time. Turns made in a minimum space. Empty platforms can be stacked vertically or wheeled from place to place like hand trucks. Write for full information to

Colson

THE COLSON CO.
ELYRIA, OHIO



You Pay For Them Whether
You Buy Them Or Not!

X-70 Refrigerator Truck fits all cabinets, with or without legs, or crated. Prevents damaging cabinet, floor or walls. Only pads touch cabinet. Heavy duty all steel frame. One truck with top casters and handles for tilting and rolling into vehicles and on stairs. Complete set, \$34.50. Ball Bearing swivel casters on one end, \$5 extra.

Balance Refrigerator Truck—also ideal for heavy boxes, crates, stoves and furniture. Padded nose piece has instant, exact adjustment, \$25.

New Buckeye Sill Piano Truck—Heavy Duty. Center wheel allows balancing and turning without lifting. Handles uprights, grands and baby grands easily and safely. Prevents scraping or marring floors. Also 10 other styles.

Write today for free circulars.

Self-Lifting Piano Truck Co.
Findlay, Ohio
Manufacturers of Trucks Since 1901

BOOKS AND PAMPHLETS OF INTEREST TO THE INDUSTRY

These Can Be Supplied, at the Prices Indicated, by

DISTRIBUTION AND WAREHOUSING

249 West 39th Street, New York City

Codes of Fair Competition Approved by NRA

Merchandise Warehousing Trade	\$0.05
Household Goods Storage and Moving Trade.....	0.05
Trucking Industry	0.05
Domestic Freight Forwarding Industry.....	0.05

Corporations Doing Business in Other States	5.00
State Regulations and Requirements. By H. A. Haring	

Custom House Guide	10.00
Contents include all warehousing regulations prescribed by U. S. Customs authorities, and information on how to become bonded; also warehousing standard terms and conditions.	

Household Goods Warehousing in the United States	6.00
Selection of site, building design and construction, accounting, stowing, insect control, estimating, cartage, packing, rates, insurance, etc. By Clarence A. Aspinwall	

New Business for Warehouses	3.00
Fifty articles published originally in <i>Distribution and Warehousing</i> and now revised and brought up to date by the author, on the storage executive's important problem of attracting new accounts among national distributors. 322 pages. By H. A. Haring	

Rate Schedules for Merchandise Warehousemen	5.00
A tariff-building manual compiled by the Merchandise Division of the American Warehousemen's Association. Includes the Standard Contract Terms and Conditions.	

Simplified Rate Manual for Merchandise Warehousemen

\$3.00

Compiled and published by the Texas Warehouse & Transfermen's Association, Inc. A basis of scientific rate structure; an analysis of handling and draying revenues. BY D. W. TACKETT

Standard Contract Terms and Conditions	0.05
A Department of Commerce publication.	

Suggestions for the Practice of Commercial Arbitration in the United States	1.85
Prepared by the American Arbitration Association.	

Warehouse Directory (subscription to <i>Distribution and Warehousing</i> included) ..	3.00
The industry's annual reference volume, containing statistics and data regarding warehouse companies throughout the United States, Canada, and foreign countries.	

Warehousing	10.00
Trade customs and practices; financial and legal aspects. BY H. A. HARING	

Warehousing and Transportation Economies in Distribution	0.05
A study by the Domestic Distribution Department of the Chamber of Commerce of the United States. Outlines when and how public warehousemen can save money for distributors.	

Warehousing General Merchandise—An Encyclopedia	
Prepared by the American Warehousemen's Association.	
Regular Edition to A.W.A. members: Vol. I, and Vol. II. Both	8.00
Regular Edition to non-members: Vol. I, and Vol. II. Both	12.50

Please Send Payment With All Orders

Warehouse Advertisers Index

ALABAMA

Page 75

Birmingham

Harris Tfr. & Whse. Co.
Strickland Tfr. & Whse. Co.
Wittichen Tfr. & Whse. Co.

Mobile

Merchants Tfr. Co.

Montgomery

Alabama Tfr. & Whse. Co.
Modler Tfr. & Sigs. Co.

ARIZONA

Page 75

Phoenix

Chambers Tfr. & Sigs. Co.
Lightning Moving & Sigs. Co.

Tucson

Tucson Whse. & Tfr. Co.

ARKANSAS

Page 75

Fort Smith

Arkansas Whse. Co.
O. K. Tfr. & Sigs. Co.

Little Rock

Commercial Whse. Co.
Terminal Whse. Co.

CALIFORNIA

Pages 76-77

Long Beach

City Tfr. & Sigs. Co.

Los Angeles

Bakins Van & Sigs. Co.
California Whse. Co.
Los Angeles Warehouse Co.
Lyon Van & Sigs. Co.
Metropolitan Whse. Co.
Overland Term. Whse.
Pacific Commercial Whse., Inc.
Prudential Sigs. & Moving Co.
Star Truck & Whse. Co.
Union Term. Whse.
Westland Whse.

Oakland

Howard Term. Whse.

San Francisco

Farnsworth & Rugles
Gibralter Whse.
Haslett Whse. Co.
San Francisco Whse. Co.

COLORADO

Page 77

Danver

Weicker Tfr. & Sigs. Co.

Pueblo

Burch Whse. & Tfr. Co., Inc.

CONNECTICUT

Pages 77-78

Bridgewater

Hartford Despatch & Whse. Co.

Hartford

Boat Line Whse. Co., Inc.
Hartford Despatch & Whse. Co., Inc.

New Haven

Davis Sigs. Co.
Smedley Co.
West Haven Trucking Co.

Stamford

Schaefer & Son, Inc., Wm. H.

DISTRICT OF COLUMBIA

Page 78

Washington

Federal Sigs. Co.
Merchants Tfr. & Sigs. Co.
Security Sigs. Co.
Smith's Tfr. & Sigs. Co., Inc.
Terminal Refrigerating & Whse. Corp.
United States Sigs. Co.

FLORIDA

Page 79

Jacksonville

Union Term. Whse. Co.
Vann Warehouse Co., Inc.

Miami Beach

Washington Sigs. Co., Inc.

Tampa

Caldwell Bonded Whse., Inc.
Lee Term. & Whse. Corp.
Warehouse, Inc.

GEORGIA

Page 79

Atlanta

General Whse. & Sigs. Co.
Monroe Bonded Whse.

Augusta

Reliable Tfr. Co.

Columbus

Burnham's Sigs. & Van Service

Savannah

Savannah Bonded Whse. & Tfr. Co.

HAWAII

Page 79

Honolulu

City Tfr. Co.

IDAHO

Page 79

Boise

Boise Cold Sigs. Co.

ILLINOIS

Pages 80-85

Chicago

Anchor Sigs. Co.
Central Sigs. & Fwdg. Co.
Crooks Term. Whse.
Currier-Lee Whse. Co.
Dietrich Whse. Co.
Empire Whse., Inc.
Griswold-Walker-Bateman Co.
Lincoln Warehouse Corp.
Midland Whse. & Tfr. Co.
Producers Whse. Co.
Railway Term. & Whse. Co.
Reebie & Bro., Inc., W. C.
Republic Whse. Co.
Seng Waterway Whse. Co.
Soo Term. Whse.
Tooker Sigs. & Fwdg. Co.
Wakem & McLaughlin, Inc.
Werner Bros.-Kennelly Co.

Danville

Danville Tfr. & Sigs. Co.

Decatur

Decatur Whse. Co.

Elgin

Elgin Sigs. & Tfr. Co.

Joliet

Joliet Whse. & Tfr. Co.

Peoria

Federal Whse. Co.
National Whse. Corp.

Rockford

Bartlett Sigs. Whse.

Rock Island

Rock Island Tfr. & Sigs. Co.

INDIANA

Pages 83-84

Evansville

Johnson Term. Corp., Mead
Terminal Whse. Co., Inc.

Fort Wayne

Fort Wayne Sigs. Co.
Petit Sigs. Whse. Co.

Hammond

Johnson Tfr. & Fwdg. Whse.

Indianapolis

Coburn Sigs. & Whse. Co., Henry
Indianapolis Whse. & Sigs. Co.
Strohm Whse. & Cigs. Co.
Tripp Whse. Co.

Terre Haute

Bauermeister Term. Co.

IOWA

Page 84

Cedar Rapids

Cedar Rapids Tfr. & Sigs. Co.

Davenport

Kwert & Richter Exp. & Sigs. Co.

Des Moines

Blue Line Sigs. Co.
Merchants Tfr. & Sigs. Co.
White Line Tfr. & Sigs. Co.

Mason City

Mason City Whse. Corp.

Sioux City

Iseminger's Sigs. & Cigs. Co.

Waterloo

Iowa Whse. Co.

KANSAS

Pages 84-85

Hutchinson

Cody Tfr. & Sigs. Co.

Kansas City

Grandview Club Tfr. & Sigs. Co.
Inter-State Tfr. & Sigs. Co.

Topeka

Topeka Tfr. & Sigs. Co., Inc.

Wichita

Brokers Office & Whse. Co.
Cassell Tfr. & Sigs. Co.
Central Whse. & Sigs. Corp.
Mid-Continent Whse. Co.
United Whse. Co.

KENTUCKY

Page 85

Lexington

Union Tfr. & Sigs. Co., Inc.

Louisville

Fireproof Sigs. Co., Inc.
Lamppin Whse. Co.
Louisville Public Whse. Co.

LOUISIANA

Pages 85-86

Monroe

Faulk-Collier Bonded Whse., Inc.

New Orleans

Bienville Whse. Corp., Inc.
Commercial Term. Whse. Co., Inc.
Douglas Shipside Sigs. & Douglas
Public Service Corp.
Gallagher Tfr. & Sigs. Co., Inc.
Independent Whse. Co., Inc.
Pelican Sigs. & Tfr.
Standard Whse. Co., Inc.

MAINE

Page 86

Bangor

McLaughlin Whse. Co.

MARYLAND

Pages 86-87

Baltimore

Baltimore Fidelity Whse. Co.
Baltimore Sigs. Co.
Camden Warehouses
Central Whse. Co., Inc.
Devendon Tfr. & Sigs. Co.
Fidelity Sigs. Co.
Geipe, Inc., J. Norman
McCormick Whse. Co., Inc.
Security Sigs. Co.
Terminal Whse. Co.

MASSACHUSETTS

Pages 87-88

Boston

Bankers Whse. Co.
Buckley Co., T. G.
Congress Stores, Inc.
Dunn Co., D. W.
Federal Whse., Inc.
Fitz Whse. & Dist. Co.
Hoosac Sigs. & Whse. Co.
Merchants Whse. Co.
Wiggin Terminals, Inc.
Woodberry Co., D. S.

Cambridge

Clark & Reid Co., Inc.

Fall River

Keogh Sigs. Co.
Mackenzie & Winslow, Inc.

Pittsfield

Roberts & Sons, Inc., T.

Springfield

Atlantic States Whse. & Cold Sigs. Co.
Hartford Despatch & Whse. Co.

MICHIGAN

Pages 89-90

Detroit

Central Detroit Whse. Co.
Detroit Harbor Terminals, Inc.
Federal Whse. Co.
Grand Trunk Ry. Term. & Cold Sigs. Co.
Henry & Schram Sigs. & Tfr. Co., John
Ivory Sigs. Co., Inc., John F.
Jefferson Term. Whse.
Owl Moving & Sigs. Co.
Riverside Sigs. & Cigs. Co.
United States Whse. Co.
Wayne Whse. Co.
Wolverine Sigs. Co., Inc.

Flint

Central Whse. Co.

Grand Rapids

Columbian Sigs. & Tfr. Co.

Lansing

Fireproof Sigs. Co.
Lansing Sigs. Co.

Saginaw

Central Whse. Co.

MINNESOTA

Pages 90-91

Minneapolis

Anchor Whse., Inc.
Cameron Tfr. & Sigs. Co.
Kedney Whse. Co.
Minneapolis Term. Whse. Co.
Northwestern Term. Co.
Northwest Whse. Co.

Rochester

Carey's Tfr. & Sigs.

St. Paul

Central Whse. Co.
St. Paul Term. Whse. Co.
Kedney Warehouse Co.

MISSISSIPPI

Page 91

Jackson

Ricks Sigs. Co.

MISSOURI

Pages 91-93

Jefferson City

Commerce Cigs. Co.

Joplin

Tonnies Tfr. & Sigs. Co.

Kansas City

A.B.C. Fireproof Whse. Co.
Adams Tfr. & Sigs. Co.
Central Sigs. Co.
Crooks Term. Whse.
Monarch Tfr. & Sigs. Co.
Murray Tfr. & Sigs. Co., W. H.
Only Way Tfr. & Whse. Co.
Radial Whse. Co.
Smith Sigs. Co., Inc., H. H.
United Whse. Co.
Walnut Sigs. & Dist. Co.

St. Joseph

Terminal Whse. of St. Joseph, Inc.

St. Louis

Columbia Terminals Co.
Langan Sigs. & Van Co., Ben A.
Long Whse., S. N.
St. Louis Mart, Inc.
St. Louis Term. Whse. Co.

NEBRASKA

Pages 93-94

Grand Island
Sullivan's Grand Island Stge. Co.
Hastings
Borley Stge. & Tfr. Co., Inc.
Lincoln
Sullivan's Tfr. & Stge. Co.
Union Term. Whse. Co.
Omaha
Rushman Whse. & Stge. Co.
Central Stge. & Van Co.
Ford Bros. Van & Stge. Co.
Gordon Stge. Whses., Inc.
Knowles Stge. Co.
Pacific Stge. & Whse. Co.
Terminal Whse. Co.

NEW HAMPSHIRE

Page 94

Manchester
McLane & Taylor

NEW JERSEY

Pages 94-95

Asbury Park
Anderson Bros.
East Orange
Lincoln Stge. Whses.
Hackensack
Holman & Co., Inc., Geo. B.
Jersey City
K & E DeLux Padded Van Co., Inc.
Newark
Essex Whse. Co.
Knickerbocker Stge. Whse. Co.
Lehigh Whse. & Transp. Co., Inc.
New Brunswick
Sisser Bros.
South Orange
South Orange Stge. Co., Inc.
Trenton
Petty Exp. & Stge. Co.

NEW YORK

Pages 95-100

Albany
Albany Term. & Security Whse. Co., Inc.
Central Railway Term. & Cold Stge. Co., Inc.
Hudson River Stge. & Whse. Corp.
Amsterdam
Mau, Inc., George H.
Binghamton
Southco, Inc., John B.
Brooklyn
Eagle Whse. & Stge. Co.
Healey & Sons, Inc., Thomas F.
Long Island Stge. Whses.
Strang, Inc., Chas. D.
Strang Whses., Wm. H.
Buffalo
Knowlton Whse. Co.
Larkin Co., Inc.
Market Term. Whse.
Terminals & Transportation Corp.
Elmira
Bimberg Sons, Joseph
Rice Stge. Corp., A. C.
Forest Hills
Forest Hills Fpf. Stge. Co.
Great Neck
Great Neck Stge. Co., Inc.
Hempstead
Hempstead Stge. Corp.
Jackson Heights
Kallej, Inc., Fred G.
Jamaica
Jamaica Stge. Whse. Co.
Kew Gardens
Kew Gardens Stge. Whse.
New Rochelle
O'Brien's Fpf. Stge.
New York City
Abington Whse., Inc.
Bowling Green Stge. & Van Co.
Bush Terminal Co.
Byrnes Bros. Whses., Inc.
Day & Mayer, Murray & Young, Inc.
Dunham & Reid, Inc.
Ellinger's Fpf. Whse., Inc.
Gilbert Stge. Co., Inc.
Globe Fpf. Stge. Whse. Co., Inc.

Hahn Bros. Fpf. Whses., Inc.
Lackawanna Term. Whses., Inc.
Lehigh Harlem River Term. Whse., Inc.
Lincoln Whse. Corp.
McCormack Trucking Co., Inc.
T. I.
Midtown Whse., Inc.
Royal Whse. Corp.
Santini Bros., Inc.
Seaboard Stge. Corp.
Starrett-Lehigh Bldg.
Warwick-Thomson Co.

Rochester
Clancy Carting Co., Inc., Geo. M.
Sam Gottry Carting Co.
Monroe Whse. Co., Inc.
Rochester Stge. Whses., Inc.

Schenectady
McCormack Highway Transp., Inc.

Syracuse
Flag Stge. Whse. Co.
Great Northern Whses., Inc.
King Stge. Whse., Inc.

Utica
Broad St. Whse. Corp.
Jones-Clark Trucking & Stge. Co., Inc.
Utica Whse. Co., Inc.

White Plains
Carpenter Stge., Inc.
Evans & Sons, Inc., J. H.

Yonkers
McCann's Stge. Whse. Co.

NORTH CAROLINA

Page 100

Charlotte
American Stge. & Whse. Co.
Carolina Tfr. & Stge. Co.
Union Stge. & Whse. Co.
Wilmington
Farrar Tfr. & Stge. Whse.

NORTH DAKOTA

Page 100

Fargo
Union Stge. & Tfr. Co.

OHIO

Pages 100-103

Akron
Cotter-City View Stge. Co.
Knickerbocker Whse. & Stge. Co.
Canton
Canton Stge., Inc.
Cincinnati
Baltimore & Ohio Whse. Co.
Cincinnati Term. Whses., Inc.
Consolidated Trucking, Inc.
Cleveland
Bramley Storage Co.
Britten Term., Inc.
Distribution Term. & Cold Stge. Co.
Greerley-General Whse. Co.
Lederer Term. Whse. Co.
Lincoln Stge. Co.
Neal Stge. Co.
Railway Whses., Inc.

Columbus
Columbus Term. Whse. Co.
Columbus Whse., Inc.
Edwards Tfr. & Stge. Co.
Merchandise Whse. Co.
Neillson Whse. Co.

Marion
Merchants Tfr. Co.
Wright Tfr. & Stge. Co.

Middletown
Jackson & Sons Co.

Springfield
Wagner Whse. Corp.

Stonewall
Travis Co., Z. L.

Toledo
Great Lakes Term. Whse. Co.
Toledo Term. Whse., Inc.

Youngstown
Fisher-Gilder Cartage & Stge. Co.

OKLAHOMA

Page 103

Oklahoma City
Commercial Whse. Co.
O. K. Tfr. & Stge. Co., Inc.
Oklahoma Bonded Whse. Co.
Red Ball Int. Tfr. & Stge. Co.

Tulsa
Hodges Fpf. Whses., Joe
Tulsa Term. Stge. & Tfr. Co.

OREGON

Pages 103-104

Portland
Colonial Whse. & Tfr. Co.
Holman Tfr. Co.
Oregon Tfr. Co.
Rapid Tfr. & Stge. Co.
Wilhelm Whse. Co., Rudie

PENNSYLVANIA

Pages 104-105

Altoona
Altoona Stge. & Tfr. Co.
Bethlehem
Lehigh & New England Term. Whse.

Erie
Erie Stge. & Ctr. Co.

Harrisburg
Harrisburg Stge. Co.

Hazleton
Karn's Tfr. & Stge.

Lancaster
Keystone Exp. & Stge. Co.

New Castle
Keystone-Lawrence Tfr. & Stge. Co.

Oil City
Carnahan Tfr. & Stge.

Philadelphia
Atlas Stge. Whse. Co.
Fenton Stge. Co.
Fidelity-20th Century Stge. Whses.
Gallagher's Whses.
Miller North Broad Stge. Co.
Terminal Whse. Co.

Pittsburgh
Duquesne Whse. Co.
Haugh & Keenan Stge. & Tfr. Co.
Kirby Tfr. & Stge. Co.
White Term. Co.

Scranton
Post, R. F.
Quackenbush Whse. Co., Inc.

Uniontown
Keystone Tfr. Co.

Wilkes-Barre
Wilkes-Barre Whse. Co.

Williamsport
Williamsport Stge. Co.

RHODE ISLAND

Page 106

Providence
Terminal Whse. Co. of R. I., Inc.

SOUTH CAROLINA

Page 106

Charleston
Charleston Whse. & Fwdg. Co.

TENNESSEE

Pages 106-107

Chattanooga
Textile Stge. & Whse. Co.

Knoxville
Fireproof Stge. & Van Co., Inc.
Rowe Tfr. & Stge. Co.

Memphis
General Whse. & Dist. Co.
Foston Stge. Whse., Inc., John H.
Rose Whse. Co.

Nashville
Bond, Chadwell Co.
Central Van & Stge. Co.
Price-Bass Co.

TEXAS

Pages 107-108

Amarillo
Armstrong Tfr. & Stge. Co., Inc.
Bishop Whse. & Stge. Co.

Austin
Scobey Fpf. Whse. Co.

Corpus Christi
Crocker Tfr. & Stge. Co.

Dallas
American Tfr. & Stge. Co.
Dallas Tfr. & Term. Whse. Co.
Dallas-Trinity Whse. Co.
Inter-State Fpf. Stge. & Tfr. Co.

Fort Worth
Blayton-O'Keefe Fpf. Stge. Co.
General Cartage Co.
O. K. Whse. Co.
Texas & Pacific Term. Whse. Co.

Hartings
Jones Tfr. & Stge. Co., Inc.

Houston
Patrick Tfr. & Stge. Co.
Universal Term. Whse. Co.
Westheimer Whse. Co., Inc.

San Antonio
Central Whse. & Stge. Co.
Merchants Tfr. & Stge. Co.
Muegge-Jennell Whse. Co.
Scobey Fpf. Stge. Co.
Southern Tfr. Co., Inc.

Tyler
East Texas Term. Whse. Co., Inc.
Tyler Whse. & Stge. Co.

Wichita Falls
Tarry Whse. & Stge. Co.

UTAH

Pages 108-109

Ogden
Western Gateway Stge. Co.

Salt Lake City
Central Whse.
Jennings-Cornwall Whse. Co.
Security Stge. & Com. Co.

VIRGINIA

Page 109

Norfolk
Bell Stge. Co., Inc.

Richmond
Brooks Tfr. & Stge. Co., Inc.
Virginia Bonded Whse. Corp.

Roanoke
Roanoke Public Whse.

WASHINGTON

Page 109

Seattle
A.B.C. Stge. Co.
Ezyros Tfr. & Whse. Co., Inc.
Lyon Van & Stge. Co.
Taylor Edwards Whse. & Tfr. Co., Inc.
United Whse. Co.
Winn & Russell, Inc.

Spokane
Spokane Tfr. & Stge. Co.

WEST VIRGINIA

Page 110

Huntington
Malar Sales & Stge. Co.

WISCONSIN

Page 110

Eau Claire
Sioux Stge. & Fwdg. Co.

LaCrosse
Gateway City Tfr. Co.
LaCrosse Term. Whse.

Madison
Union Tfr. & Stge. Co.

Milwaukee
Atlas Stge. Co.
Hansen Stge. Co.
Lincoln Fpf. Whse. Co.
National Whse. Corp.

CANADIAN WAREHOUSE SECTION

BRITISH COLUMBIA

Page 111

Vancouver
Johnston National Stge., Ltd.

ONTARIO

Page 111

Toronto
Canadian Ball & Harbour Term., Ltd.
Tippet-Richardson, Ltd.

QUEBEC

Page 111

Montreal
Ballargeron Exp., Ltd., J. B.
Morgan Trust Co.
Westmount Tfr. & Stge., Ltd.

FOREIGN WAREHOUSE SECTION

MEXICO

Page 111

Mexico City
Bodegas Chappe, S. A.

WAREHOUSE DIRECTORY

A Guide to representative Merchandise, Cold Storage and Household Goods, Warehouses, Forwarders, Terminals, and Transfer Companies, arranged by States and Towns.

"Andy Says"



THE special Refrigeration Section in this issue of *Distribution and Warehousing* measures up in importance not only to those already using motor trucks for food preservation in transit over the road, but for those contemplating this service. The subject of motor truck refrigeration is an all-absorbing one that concerns not only the warehouseman, but the motor freight operator and producer as well.

Though considerable ground is covered in this issue's section, the subject by virtue of its many ramifications must be continued in future issues to keep pace with the many developments that are taking place in design, use, operation of equipment, etc.

As a result, the June issue will be devoted in part to a discussion of insulation and the important part it plays in making refrigeration fully effective and more economical.

Over 17 billion dollars is spent annually for perishable food and at some time during its progress from the source of production this food must be hauled over the road. The chances for spoilage are tremendous and in lieu of this, means of preservation become an all-important problem.

Frozen fish is being hauled over the road successfully from New England to Missouri and there is no reason why it cannot be taken even further. All forms of transportation properly coordinated with the facilities offered by the cold storage industry will make it possible to widen the market for perishable delicacies so that every point in the country can enjoy such a service.

Distribution and Warehousing plans to keep its readers in touch with all developments in motor truck refrigeration. Many of the practices now considered satisfactory will become obsolete with these developments, a number of which will be announced shortly.

Business is improving if people will only tell the truth. I travel extensively and my opinions are built around many interviews. Though these opinions may not apply to each individual who reads this, nevertheless, business is on the up. Some have told me that their business is as much as 300 per cent over last year's; others only 50 per cent, but I have yet to find anybody who does not say that his business is much better than a year ago.

I find a deep sentiment favoring the continuation of the Codes. In some places they have been completely disregarded but with that attitude I find only dissatisfaction and few making an honest living. In other cities where the Code has been lived up to more generously, the feeling is different. They have found the answer to an intolerable condition which apparently nothing but the N.R.A. has solved. Let us all hope that the Code stays put for at least another year. This will give it the fair trial it deserves. Then, if by chance, there is any desire to change, let the associations be prepared to take up and carry on the work for which the Code was originally formed.

An industry not organized is simply out of luck with itself and with the world.

"Andy"

BIRMINGHAM, ALA.

1880—Fifty-Five Years of Honorable Service—1935

HARRIS TRANSFER and WAREHOUSE CO.
FIREPROOF WAREHOUSES

MERCHANDISE and HOUSEHOLD GOODS
STORAGE HAULING PACKING
Prompt Service—Accurate Accounting
First Avenue, at 18th Street, South
Members: A. W. A., N. F. W. A., S. O. W. A.,
A. C. W., A. L. A. T. & W. A.

BIRMINGHAM, ALA.

STRICKLAND
Transfer & Warehouse Co.
1700-1702 2nd Ave. So.

General Merchandise Storage and Distribution
Pool Car Service a Specialty—Motor Truck Service
Centrally Located—Free Switching from All R.Rs.

BIRMINGHAM, ALA.



WITTICHEN

Transfer & Warehouse Co.
Fireproof Warehouse
Household Goods and Merchandise
Agents: Aero Mayflower Transit Company
Member of Allied Distribution, Inc.

MOBILE, ALA.

Merchants Transfer Company

HEAVY HAULING—STORAGE
Pool Cars and General Merchandise—Bonded
Authorized Transfer Agents
A.T.&N., G.M.&N., L.&N., M.&O. &
Southern Railroads. Clyde Mallory S/S Co.

MONTGOMERY, ALA.



Alabama Transfer & Warehouse Co.

Cor. N. Perry & Pollard Sts.
BONDED — FIREPROOF —
WAREHOUSE
STORAGE & DISTRIBUTION
Members N.F.W.A. — A.W.A. — S.O.W.A. —
A.C.W. — A.V.L.



MONTGOMERY, ALA.

Subscriber to Merchandise Warehousing Trade
Code, Certificate No. 34-854.

MOELLER TRANSFER & STORAGE CO.

210-220 COOSA STREET

Merchandise and Household Goods
Low Insurance Rate Bonded Trucking Service
Pool Car Distribution
Members: A.W.A., N.F.W.A., S.O. W.A.

PHOENIX, ARIZONA

H. W. CHAMBERS, PRESIDENT

Chambers Transfer and Storage Co.

301 South Fourth Avenue
Storing and Packing Moving and Shipping
Warehousing and Distribution service for merchan-
dise and furniture.
Sprinklered warehouse—Insurance rate 46c.
Member—N. F. W. A.

The Men Who Distribute

Arbuckle Products

Read DISTRIBUTION AND WAREHOUSING
and consult the Directory of Warehouses

PHOENIX, ARIZONA

**The Lightning Moving &
Storage Co.**

**TRANSFER
AND
STORAGE**

Storage capacity 68,000 sq. ft. General receiving and
forwarding agents. Pool car distribution our specialty.

TUCSON, ARIZONA

Tucson Warehouse & Transfer Co.

POOL CAR DISTRIBUTORS
FIREPROOF STORAGE

110 East Sixth Street Tucson, Arizona

FORT SMITH, ARK.

W. J. ECHOLS, Jr.
President

W. J. ECHOLS
Vice-President

J. MONTAGUE WILLIAMS
Manager

ARKANSAS WAREHOUSE COMPANY

General Merchandise Storage. Forwarding. Pool Car Distribution.
35,000 Square Feet Floor Space.
Modern Fire Proof Building. Sprinkler Equipped.
Lowest Insurance Rate.
On St. Louis, San Francisco Railroad Reciprocal Switching.

FORT SMITH, ARK.



O. K. TRANSFER & STORAGE CO.

Rogers Ave. and 2nd St.
FORT SMITH, ARK.

Storing — Shipping — Moving
Pool-Car Distributing a Specialty



LITTLE ROCK, ARK.

COMMERCIAL WAREHOUSE CO.

801-7 East Markham St.

"A Complete Service"

Modern Offices—Storage—Drayage and Distribution
Located in the heart of the wholesale and shipping
district.
Fireproof Sprinklered **Low Insurance**
Private Railroad Siding **Quick Service**

LITTLE ROCK, ARK.

Arkansas' Largest Warehouse
Merchandise—Household Storage



NEW TERMINAL WAREHOUSE CO.

LITTLE ROCK ARKANSAS

Member American Warehousemen's Association
American Chain of Warehouses.

•
Absolutely
Fireproof
Low
Insurance
Rates
Pool Car
Distribution
Compartments
for household
Goods
•



LONG BEACH, CAL.

STORAGE-TRUCKING
DISTRIBUTION
FREIGHT-MACHINERY
TRUCK CRANES
RIGGING



LOS ANGELES, CAL.

Don't Gamble! Just
Ship to Bekins

We own and operate
depositories in
principal cities of
California



LOS ANGELES, CAL.

EFFICIENT WAREHOUSING
and DISTRIBUTION
CALIFORNIA WAREHOUSE CO.
837 TRACTION AVE.



Sprinklered Concrete
Building
Central Location
Spur Tracks
Low
Insurance
Cartage
Service
Merchandise
Exclusively

Specialist in Food Distribution

LOS ANGELES, CAL.

316 Commercial Street

Los Angeles Warehouse Company

Household Goods and Merchandise

Consign your shipments for Hollywood, Beverly
Hills, and Los Angeles direct to us. We will insure
you satisfied customers. A complete service.

LOS ANGELES, CAL.



LOS ANGELES, CAL.

**METROPOLITAN
WAREHOUSE CO.**

Merchandise, Warehousing
and Distribution

Reinforced Concrete Sprinklered Building
Centrally Located in Metropolitan Area
Fire Insurance Rate 11.7 Cents

1340-1356 EAST SIXTH STREET
LOS ANGELES



Offices for Rent
Telephone and
Secretarial Service
Sub Basement for
Cool, Dry Storage

MEMBER

ALLIED DISTRIBUTION, Inc.
1523 Newberry Ave. 11 West 42nd St.
Chicago, Ill. New York City

LOS ANGELES, CAL.

Overland Terminal Warehouse

Ninth and Alameda Sts.

General Merchandise Storage
U. S. Customs Bonded Storage
Cool Room Accommodations

"Vacufume" Process of Fumigation

MANAGED AND OPERATED BY

CROOKS TERMINAL WAREHOUSES

CHICAGO NEW YORK KANSAS CITY
419 W. Harrison St. 76 Beaver St. 1104 Union Ave.

CALIFORNIA'S MOST MODERN WAREHOUSE
SERVED BY THE UNION PACIFIC

LOS ANGELES, CAL.

Pacific Commercial Warehouse, Inc.

Owned and Operated by

J. D. & A. B. Spreckels Investment Co. of San Francisco
California

Centrally located — Uncongested district
Loading dock accommodations for 22 trucks

GENERAL MERCHANDISE STORAGE

POOL CAR DISTRIBUTORS

Complete Warehousing & Trucking Service
Cyanide Fumigating—Carload Capacity

923 East Third St., Los Angeles, California

LOS ANGELES, CAL.

We Solicit Your Shipments and
Pool Car Distribution



Members: California Van & Storage Association
National Furniture Warehousemen's Association

LOS ANGELES, CAL.

1917-1935 INDUSTRIAL STREET

Star Truck & Warehouse Co.

COMPLETE FACILITIES DISTRIBUTION EFFICIENT SERVICE
Storage Drayage

Represented by Distribution Service

340,000 Square Feet
New York



56 Motor Trucks
Chicago San Francisco

LOS ANGELES, CAL.

W. E. TEAGUE, Pres.
B. F. JOHNSTON, Gen. Mgr.

UNION TERMINAL WAREHOUSE

General offices, 737 Terminal St.

Free and U. S. Customs bonded storage. The largest, most complete
and efficient Warehouse and Distribution Service in the West.
Insurance Rate as low as 14.4 cents per \$100 per year.
Daily motor truck service to all parts of the city and Los Angeles
Harbor.

The Men Who Distribute

Vacuum Oil

Read **DISTRIBUTION & WAREHOUSING**
and consult the Directory of Warehouses

LOS ANGELES, CAL.

Make Westland Warehouses

Your Distribution Headquarters
in So. California

Member, A. W. A.,
C. W. A., L. A. W. A.

Write for Booklet

L. A. Junction Ry.
Service

Westland
Warehouses, Inc.
4814 Loma Vista Ave.,
Los Angeles, Calif.
Room 1305
38 So. Dearborn St.
Chicago, Ill.



OAKLAND, CALIF.

HOWARD TERMINAL WAREHOUSES

95 Market Street, Oakland, Calif.

Oakland terminus of steamship lines, transcontinental railways
and motor truck lines.

Shipside warehousing—drayage eliminated between
piers and warehouses.

A COMPLETE EFFICIENT WAREHOUSING SERVICE

Member AWA—CalWA—SFWA

SAN FRANCISCO, CALIF.

FARNSWORTH & RUGGLES

(Established in 1859)

109 DAVIS STREET

WAREHOUSING GENERAL MERCHANDISE

Pool Car Distribution Motor Truck Fleet
Terminal at First, Brannan and Federal Streets
in the heart of the shipping district

SAN FRANCISCO, CALIF.

GIBRALTAR WAREHOUSES

201 CALIFORNIA ST.

OPERATED IN CONJUNCTION WITH

OVERLAND FREIGHT TRANSFER CO.

AND

TILDEN SALES BUILDING

SAN FRANCISCO, CALIF.

CONSIGN TO
THE HASLETT WAREHOUSE CO.
280 Battery St., San Francisco

Operators of the most complete warehouse and distribution system in the
San Francisco Bay area.

STORAGE—CARTAGE—COLD STORAGE (OAKLAND)
FIELD WAREHOUSING—FAST TRANSBAY DELIVERY SERVICE

S. M. HASLETT, President
Member American Warehousemen's Assn.
Member American Chain of Warehouses, Inc.

SAN FRANCISCO, CAL.



A Complete Ser-
vice for the
Warehousing
and Distribution
of General
Merchandise

Warehousing, Distribution, Draying, Office Accommoda-
tions, Telephone Service, Space for Lease

San Francisco Warehouse Co., 625 Third Street

Member: American Warehousemen's Association
Distribution Service, Inc.

DENVER, COL.

We offer a complete service—Merchandise and
Household Goods Storage, Pool Car Distribution,
Moving, Packing and Forwarding.

We also operate the Weicker Transportation Co., a
statewide daily motor freight service under regulation of
the Public Utilities Commission.

Connections with Interstate Truck Lines to
Principal Cities.

Burglar Proof Silver Vaults, Cedar Lined Rug
Vault, Fumigating Vault, Private Lockers

The WEICKER TRANSFER & STORAGE CO.

1700 Fifteenth Street

DENVER

COLORADO

Member of N. F. W. A.—A. C. W.—A. W. A.

PUEBLO, COLO.

BURCH WAREHOUSE AND TRANSFER CO. INC.

General Office and Warehouse
200 SO. SANTA FE AVENUE
Modern Sprinklered Fireproof Building
Freight Forwarding and Distribution
Household and Merchandise Storage
PACKING AND SHIPPING

Member of N.F.W.A.—A.W.A.—Colo. W.A.

BRIDGEPORT, CONN.

E. G. Mooney, Pres. J. W. Connolly, Vice-Pres.

Hartford Despatch and Warehouse Co.

1337 Seaview Avenue

STORAGE AND DISTRIBUTION SERVICE WITHIN 150-MILE
RADIUS. SPECIAL FACILITIES FOR STORING, MOVING,
PACKING AND SHIPPING OF HOUSEHOLD EFFECTS.
ALSO WAREHOUSES AT SPRINGFIELD, MASS., AND
HARTFORD, CONN.

Member of A.W.A., N.F.W.A., A.C.W., A.V.L.

HARTFORD, CONN.

BOAT LINE WAREHOUSE CO., INC.

Subscribers to the Merchandise Warehousing Trade Code,
Under Certificate No. 34-982, Reg. No. 6-3

Located on the Connecticut River
18 Van Dyke Ave.

General Merchandise Storage and Distribution

Direct Water, Rail, and Truck Connections
Large Shipment Facilities

Member of Conn. W. Assn.—Hartford Chamber of Commerce.

HARTFORD, CONN.

E. G. Mooney, Pres. J. W. Connolly, Vice-Pres.

Hartford Despatch and Warehouse Co.

252 Asylum St., Hartford, Conn.

A modern storage and distribution service. Sixteen sepa-
rate buildings. Fireproof and non-fireproof construction.
Twenty-four car private siding. Daily deliveries via rail,
boat, motor truck, to all principal towns and cities within
150 mile radius, private rooms for storage of furniture and
special facilities for moving, packing, crating and shipping
of household effects. Also warehouses at Bridgeport, Conn.,
and Springfield, Mass.



Member of A. W. A., N. F. W. A.,
A. C. W., Hartford Chamber of
Commerce, Hauling Member of the
Allied Van Lines, Inc.



NEW HAVEN, CONN.

M. E. Kiely, Mgr.

DAVIS STORAGE COMPANY

335 East St., New Haven, Conn.

Modern Fireproof Merchandise Ware-
house.

Private seven-car siding, adjacent to Steamship and
R. R. Terminals.

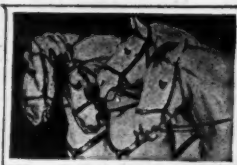
Pool and stop over cars distributed.

Motor Truck Service to all towns in Connecticut.
Low Insurance Rate. Prompt, Efficient Service.



NEW HAVEN, CONN.

STORAGE and DISTRIBUTION



Established 1860

Merchandise, automobiles, furniture—23 buildings—Low insurance rates—15 car siding—Central location—Daily truck delivery service covering Connecticut and southern Massachusetts—Bonded with U. S. Customs.

THE SMEDLEY CO.

165 Brewery St., New Haven, Conn.

Members: AWA, NFWA, CWA, MTA of C,
New Haven Chamber of Commerce,
Hauling member Allied Van Lines, Inc.



NEW HAVEN, CONN.



PAUL A. DAHLGARD, Owner

West Haven Trucking Company

Storage Warehouses

Offices, 435 Congress Ave.

Household Goods, Storage, Packing,
Shipping, Receiving

STAMFORD, CONN.

STAMFORD
DARIEN
NEW CANAAN
OLD GREENWICH
NOROTON

WM. H.

SCHAEFER

& SON, Inc.

Fireproof Storage Warehouse

Member of Conn. W.A.—N.F.W.A.

WASHINGTON, D. C.



E. K. MORRIS, President

FEDERAL STORAGE
COMPANY

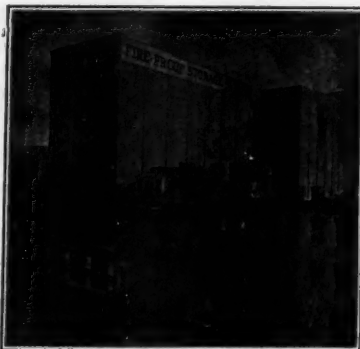
1707 FLORIDA AVENUE

(See Page Advertisement Directory Issue)

WASHINGTON, D. C.

Absolutely
FireproofMOVING
PACKING
SHIPPINGPool Car
Distribution
General Hauling

Merchants Transfer & Storage Co.
920-922 E. St., N. W.



The Men Who Distribute

American Crayons

Read DISTRIBUTION AND WAREHOUSING
and consult the Directory of Warehouses

WASHINGTON, D. C.

CONTAINER, LIFT VAN,
OR ORDINARY SHIPMENTS DELIVERED

Security Storage Company

OF WASHINGTON

Capital, Surplus and Reserves over \$1,200,000.

Security (steel) lift vans for overseas shipments
at door to door rates, with all risk insurance if
desired.

Available almost anywhere.

1140 Fifteenth Street, Washington

31 Place du Marche St. Honore, Paris

WASHINGTON, D. C.

Modern
Fireproof
BuildingLONG
DISTANCE
MOVINGPACKING
STORING
SHIPPING

SMITH'S

TRANSFER & STORAGE CO., INC.

1313-15-17-19-21 You Street, N. W.

Member—Mayflower Warehousemen's Association

WASHINGTON, D. C.

General Merchandise Storage

Pool Car Distribution—City Delivery Service

Direct Switching Connections into Warehouse
Pennsylvania Railroad

Terminal Refrigerating & Warehousing Corporation

4½ and D Streets, Southwest
Member of A. O. W.

WASHINGTON, D. C.

Established 1901

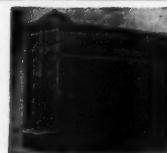
UNITED ★ STATES
STORAGE COMPANY

418 10th Street, N. W.

We Reciprocate Shipments

(See Advertisement in Directory Issue, page 137)

Member of N.F.W.A.—W.W.A.



The Men Who Distribute

Fels-Naptha Soap

Read DISTRIBUTION AND WAREHOUSING
and consult the Directory of Warehouses

The Men Who Distribute

McDougall Kitchen Cabinets

Read DISTRIBUTION & WAREHOUSING
and consult the Directory of Warehouses

JACKSONVILLE, FLA.

FLORIDA'S LARGEST WAREHOUSE
UNION TERMINAL WAREHOUSE COMPANY
East Union and Ionia Streets

Merchandise Storage—Custom Bonded—Pool Car Distribution
Reconsigning—Trucking Service—Trackage 52 Cars
Reinforced Concrete—Sprinkler System
Insurance Rate 20 Cents
Rental Compartments—Sub-Postoffice, Western Union Tel.
Members A.W.A.—A.C.W.—J.W.A.

JACKSONVILLE, FLA.

VANN WAREHOUSE COMPANY, INC.
242 E. Bay Street Jacksonville, Fla.
Merchandise Storage—Cold Storage—Pool Car Distribution

Building is centrally located, brick and concrete construction, equipped with sprinkler system and served by Sou. Ry., G.S.&F. Ry. and St. Johns River Terminal Co. Insurance Rate .38 per \$100.00.
Member of Jacksonville Warehousemen's Association

MIAMI BEACH, FLA.

Washington Storage Co., Inc.
1001 Washington Avenue
Moving—Packing—Shipping—Storage

Members NFWA, SOWA

TAMPA, FLA.

"Your Tampa Branch House"

GALDWELL
BONDED
WAREHOUSES
INCORPORATED

MERCHANDISE
Storage & Distribution
Fireproof Buildings
Waterfront Whse. and Private Docks

U. S. CUSTOMS
Bonded Storage.
Government Storekeeper retained permanently.
Normal temperatures for Wines and Liquors.

HOUSEHOLD
Moving & Storage Agents
Aero Mayflower Transit Co.
National Long Distance Movers.

Members Mayflower Warehousemen's Assn.

TAMPA, FLA.

WILLIAM J. EVE, Manager

WAREHOUSE, INC.
BONDED

CARLOAD AND COMMERCIAL STORAGE
POOLED CAR DISTRIBUTION
Morgan and Water Streets, Tampa, Florida

ATLANTA, GA.

BONDED

General Warehouse & Storage Co., Inc.
272-274 Marietta St., Atlanta, Ga.

Consigned stocks handled for Manufacturers
Remittance made day received
Store door delivery—Re-packing—Re-shipping
MERCHANDISE DISTRIBUTION
Sprinkler System—R.R. Trackage—Pool Car Distribution

ATLANTA, GA.

"Atlanta's Largest"

MONROE BONDED WAREHOUSES

Invested Capital \$325,000

Lowest Warehouse Insurance Rate in Atlanta
MERCHANDISE—COLD STORAGE—TRUCKING
Private Railroad Sidings—Concrete Warehouses
A. D. T. Service Member: A. W. A.

AUGUSTA, GA.

AIKEN, S. C.

F. L. Harrison, Pres.

RELIABLE TRANSFER CO.

General Merchandise Storage and Distribution
Household Goods Storage, Packing, Shipping
Pool Car Distribution
Direct R.R. Siding A. C. L., C. & W. C. R.R.

COLUMBUS, GA.

FOR — modern warehousing — distributing of merchandise and household goods—choose

BURNHAM'S
STORAGE AND VAN SERVICE
MOTOR FREIGHT TERMINAL
PRIVATE TRUCKAGE

Member—Southern Warehousemen's Association

SAVANNAH, GA.

Savannah's only bonded warehouse

SAVANNAH BONDED WAREHOUSE & TRANSFER COMPANY.

BAY STREET EXTENSION & CANAL.
Post Office Box 1127
General Storage—Distribution—Reconsigning
Custom House Brokers—Custom Bonded
Regular steamship service from principal Eastern, Western & Gulf ports—track connections with all rail and steamship lines.
R. B. Young, President.
Members—A.W.A.—A.C.W.—So.W.A.

HONOLULU, HAWAII

WHEN SHIPPING GOODS TO

HONOLULU

consign to us and the same will be given our best attention.
Modern Concrete Warehouses. Collections promptly remitted.
Correspondence solicited.

CITY TRANSFER COMPANY

Cable Address: LOVERINO, HONOLULU

BOISE, IDAHO

Selling Services Furnished

BOISE COLD STORAGE COMPANY

Merchandise Warehousing & Forwarding
Negotiable Warehouse Receipts Issued
Pool Car Distributors

304 S. 16th St. P. O. Box 1656 On U.P.R.R.

The Men Who Distribute

'Chiclets' Gum

Read DISTRIBUTION & WAREHOUSING and consult the Directory of Warehouses

CHICAGO, ILL.

ANCHOR STORAGE CO.

219-229 E. N. Water St. Chicago, Illinois

Truck Accommodations—400 Ft. All Under Cover. Reshipping—Merchants' Lighterage and Tunnel. Located on main channel of the Chicago River. 220,000 sq. ft. of Modern Storage Space. Private siding—C & N W Ry. with capacity of over 40 cars daily.

Low Insurance Rate

Represented by
DISTRIBUTION SERVICE, INC.

NEW YORK
100 Broad St.

CHICAGO
219 E. North Water St.

SAN FRANCISCO
625 Third St.

CHICAGO, ILL.



Chicago's only warehouse which has a Union Freight Station under the same roof. Chicago Junction Service—carload and L. C. L.—to all lines daily at flat Chicago rate.

U. S. Customs Bonded. All modern warehouse services.

Write for illustrated booklet and rates.

2001 West Pershing Road

CHICAGO, ILL.

**DOWNTOWN WAREHOUSE**

Most Centrally Located
2 Blocks from New Union Station
CANAL & HARRISON STS.
Tunnel and Trap Car Service

CROOKS TERMINAL WAREHOUSES

CHICAGO

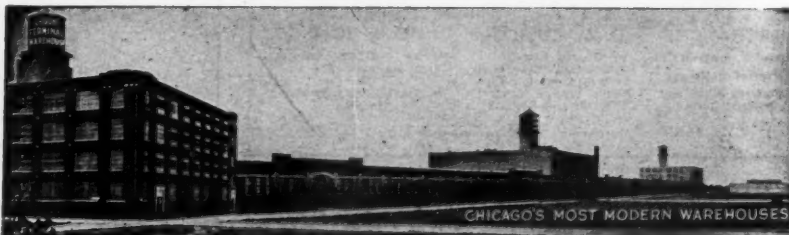
NEW YORK OFFICE: 76 BEAVER STREET

KANSAS CITY

SOUTH SIDE WAREHOUSES

5801-5967 West 65th St.

Capacity 1200 Carloads
Insurance Rates as Low as 12c.



CHICAGO'S MOST MODERN WAREHOUSES

Also operate three modern warehouses in Kansas City and the Overland Terminal Warehouse Company at Los Angeles, California.

LIBERAL LOANS MADE ON STAPLE COMMODITIES

CHICAGO, ILL.

Accessible Location.
Modern Warehouse.
Excellent Shipping
Facilities.
Delightful Offices.
Special Equipment.
Economical Service.
No cartage expense on
outbound L. C. L.
Freight.
1455 W. 37th St.

DIETRICH
WAREHOUSING
COMPANY
1455 W. 37th St.

CHICAGO, ILL.

SATISFACTION ASSURED!

A large shipper wrote us—"It is not often our interests in out-of-town shipments are accorded the careful attention you have shown."

EMPIRE WAREHOUSES INC.

General Offices 5153 Cottage Grove Ave.
W. F. CARROLL, Pres.

J. J. BARRETT, Sec'y.

CHICAGO, ILL.

FOR **REAL SERVICE** TRY**Producers Warehouse Co.**

344 No. CANAL ST.

C & NW Ry SIDING

*Also Operating***Republic Warehouse Co.**

(U.S. CUSTOMS BONDED)

372 W. ONTARIO ST.

CM & St P Ry SIDING

COMPLETE WAREHOUSE AND STORAGE SERVICE

CURRIER-LEE

Answers



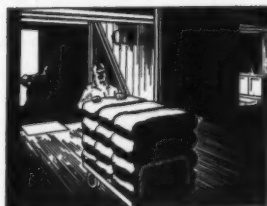
**With Cost-Cutting
TUNNEL-SERVICE**

One of many time-saving, cost-cutting features of Currier-Lee Service is the "Tunnel-Railway" station located in our building, affording direct connection with all railroads without cartage expense. Over 85 trains daily pass through this station. Over 150 locomotives and some 3000 cars are available in this unique subterranean transportation service embracing the Chicago "loop" and wholesale districts.

Expensive trucking and handling charges are eliminated. Much valuable time is saved. For details of this and many other attractive features of Currier-Lee Service, write for illustrated folder NOW.

CURRIER-LEE WAREHOUSE CO.

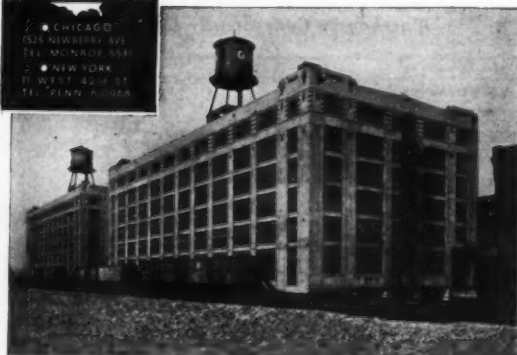
General Offices 427 W. Erie St., Chicago, Ill.



CHICAGO, ILL.

Member A. W. A.

**COMPLETE WAREHOUSING
AND DISTRIBUTING SERVICE**



**GRISWOLD-WALKER-BATEMAN
COMPANY**

1525 Newberry Ave.

Chicago

Modern buildings strategically located. Direct truckage connections with C&NW, B&O, Soo Line, PM, CGW, and B&OCT (belt line connecting all RRs.). Trap car reshipping. Motor truck deliveries. Long distance motor transportation. Guardite fumigation protection. U. S. Customs Bond. Office facilities.

Details of this complete service are described in a booklet "The Way to Distribution"—Write for your copy.

CHICAGO, ILL.

RALPH J. WOOD, Pres.

MORRISON C. WOOD, Treas.

For Shipments to the South Side's Finest Residential Districts

CONSIGN TO

The Lincoln Warehouse Corporation

Main Office and Warehouse—4259 Drexel Boulevard

"40 Years of Distinctive Service"

Personal attention of executives to customers. Collections promptly remitted.

Member N.F.W.A.

CHICAGO, ILL.



MIDLAND

Offers

**LARGE AND SMALL SHIPPERS
THREE MODERN MERCHANDISE
WAREHOUSES**

at

CHICAGO

With convenient locations

For Local Trade.

With excellent transportation facilities

for National Distribution

Chicago Junction In and Out-bound Union Freight Station—direct connections with thirty-eight railroads, no trap car, tunnel or cartage service or charges on in or out-bound LCL shipments. Receiving stations of Express, Freight Forwarding, Electric and Boat Lines on premises.

With a complete warehouse organization

fully equipped to handle merchandise rapidly and economically

Let Us Quote on Your Requirements

**Midland Warehouse & Transfer Co.
CHICAGO, ILL.**

15th Street and South Western Ave.

CHICAGO, ILL.

**W. C. Reebie & Brother
(INC.)**

Five Storage Warehouses

Established 1886

Complete facilities for the Storage, Removal, Packing or Shipping of

Household Goods, Pianos or Works of Art

Offices and Fireproof Warehouses

2325-33 N. Clark St. 4549 Broadway 5035-39 Broadway

Offices and Non-Fireproof Warehouses

2521-23 Sheffield Ave. 2525 Sheffield Ave.

General Office: 2325-33 North Clark Street

Member: N. F. W. A. & I. F. W. A.

CHICAGO, ILL.

"Chicago's Lending Warehouse"

SENG WATERWAY WAREHOUSE CO.

Complete water, rail and truck terminal, facilities with a "loop" location. Concrete dock for ocean, lake and river vessels—25 car siding capacity—own fleet of 69 trucks. Economical reshipping—tunnel—lighterage.

STORAGE and DISTRIBUTION

services to meet today's needs rest upon the character and integrity of the warehouse organization fully as much as upon modern, well-located buildings, and other facilities. Railway Terminal offers both... proved by 25 years of satisfactory service to many leading national distributors

RAILWAY TERMINAL & WAREHOUSE CO.

444 West Grand Avenue, Chicago, Illinois
ONTARIO WAREHOUSE CO., 425 WEST ONTARIO STREET

Two warehouses close to the Loop • Direct railroad connections • Office and warehouse space to rent • U. S. Customs Bonded storage • Loans on standard merchandise • Low insurance rates • Direct tunnel service • Special facilities for the storage of wines. . . . Write for information on services to meet your individual needs.

CHICAGO, ILL.

Soo Terminal Warehouses

519 W. Roosevelt Road
(Near Loop)

Merchandise Storage—Pool Car Distribution

Less Carloads To and From All Trunk Lines, North Shore Electric and Aurora and Elgin Elec., and Their Connections Handled Without Cartage Charges.
Cool Temperatures—Candy Stored All Year

Ground Floor Warehouse Spaces With or Without
Offices for Rent—Fireproof—Trackage

CHICAGO, ILL.

TOOKER STORAGE and FORWARDING CO.

(Etab. 1903)

STORAGE CARTAGE RESHIPPING LOANS

LOCATED IN THE CENTER OF DISTRIBUTION

FINEST RAILROAD FACILITIES

LOWEST INSURANCE RATES

GENERAL OFFICES: 3615 IRON ST.

New York

CHICAGO, ILL.

Los Angeles

CHICAGO, ILL.

Merchandise Storage and Distributors

WAKEM & McLAUGHLIN, Inc.

Estd. 1886

MAIN OFFICE—225 E. ILLINOIS ST., CHICAGO

U. S. Internal Revenue Bonded Warehouse
U. S. Customs Bonded Warehouse

ADVANCES MADE

Our ample financial resources enable you to negotiate loans right in our office.

Prompt Delivery and Best of Service

CHICAGO, ILL.

WERNER BROS. KENNELLY CO

STORAGE
MOVING
PACKING
SHIPPING

M. H. KENNELLY, President

Your Chicago Shipments given preferred attention. Pool cars handled on our own switch track.

Consign C. M. St. Paul & P. R. R. . . .
Wilson Ave. Branch.

CONTAINER SHIPMENTS SOLICITED

Warehouses Conveniently Located

2815 Broadway
4917 Broadway
7613 N. Paulina St.
4615 Clifton Ave.

PARK BRANCH
1750 N. Clark St.
Opposite Lincoln Park
TRAFFIC DEPT.
3133 N. Halstead St.

MAIN OFFICE:

2815 BROADWAY, CHICAGO, ILLINOIS

DANVILLE, ILL.

C. B. Hall, Pres. M. P. Hall, Sec. & Treas.

DANVILLE TRANSFER & STORAGE CO.

The only fireproof warehouse in Danville. Storage for household goods and Merchandise Distributing. Conveniently located in the heart of the wholesale district. Private siding to warehouse, and free switching from all railroads.

Low Insurance Rate

Danville is the breaking point of Eastern and Western Classification of freight rates, making a most convenient point for the distributing or storage of carloads.
Members National Furniture Warehousemen's Association.
Members Illinois Furniture Warehousemen's Association.

DECATUR, ILL.

Decatur Warehouse Company

(Shumate Transfer)

20-30 INDUSTRY COURT
TRANSFER—STORAGE

MOVING—PACKING—DISTRIBUTION

BONDED :: LICENSED :: INSURED CARRIERS

ELGIN, ILL.

Elgin Storage & Transfer Co.

A. C. MUNTZ, Pres. H. C. MUNTZ, Mgr.
Merchandise and Furniture Storage, Long Distance Hauling.
Bonded Warehouse. Storing, Packing, Shipping.
Warehouse and Office: No. 300 Brook Street

JOLIET, ILL.

Telephones 501 and 502

Joliet Warehouse and Transfer Company
Joliet, Illinois

MERCHANDISE STORAGE AND DISTRIBUTION
Best distributing point in Middle West.
Located on five Trunk Lines and Outer Belt which connects with
every road entering Chicago.
No switching charges.
Chicago freight rates apply.

PEORIA, ILL.

All Points of the Compass



Peoria is the logical center of
distribution for Illinois.
We will be pleased to explain
our service and facilities.

*Our Dependability Your Assurance of
Satisfaction*

Member of A. W. A.

FEDERAL WAREHOUSE CO.
Adams and Oak

EVANSVILLE, IND.

"Where waterway-railway-highway meet"

**MEAD JOHNSON TERMINAL
CORPORATION**



Subscribers to the Merchandise Warehousing Trade Code,
under Certificate No. 34-309.

**Combination River-Rail Truck Terminal &
Warehouse**



90,000 sq. ft. floor space on one floor. Served
by two railroads—C. & E. I. and L. & N. Re-
ciprocal switching to all Evansville industries.
Fireproof; Sprinkler system; Thermostatically
heated; Lowest insurance. Ideal trucking fa-
cilities. Store door service. Merchandise stor-
age. Pool car distribution. Served by Ameri-
can Barge Line, Mississippi Valley Barge Line
and Independent Tows.

EVERYTHING NEW—STRICTLY MODERN

EVANSVILLE, IND.

Byron Parsons, Pres.
Sec., Treas. & Mgr., Omer A. Reinhart

Terminal Warehouse Company, Inc.
915 Main St. Evansville, Ind.
Merchandise Warehouse, 10,000 square feet, concrete,
private siding on IC.
Distribution of Pool Cars

FORT WAYNE, IND.

**FORT WAYNE [WITH MIGHT AND MAIN]
STORAGE CO. [THE SAME]**

FIREPROOF AND NON-FIREPROOF BUILDINGS.
Pittsburgh, Fort Wayne & Chicago R. R.; Grand Rapids & Indiana R. R.;
Wabash R. R.—Private Sidings—Pool Car Distribution

FORT WAYNE, IND.

PETTIT'S STORAGE WAREHOUSE CO.
"FIREPROOF" BUILDINGS
STORAGE, TRANSFER, DISTRIBUTION

Located in Center of Business District
We have our own truck line and are equipped to make prompt deliveries
Private siding



PEORIA, ILL.

**NATIONAL
WAREHOUSE
CO.**

1323 SO. WASHINGTON ST.

- Merchandise Storage
- Pool Car Distribution
- Private Siding
- Low Insurance Rate
- Fireproof Building Construction
- 14 Years Warehousing Experience

ROCKFORD, ILL.

BARTLETT WAREHOUSE

TRACKAGE— —FREE SWITCHING
SPARKLING SERVICE

506-514 Cedar St. Phone Main 134

ROCK ISLAND, ILL.

THE CENTER OF THE QUAD-CITIES
160,000 POPULATION — RATE BREAKING POINT
MOTOR FREIGHT SERVICE IN ALL DIRECTIONS
FEDERAL BARGE LINE TERMINAL
C. B. & Q. SIDING—FREE SWITCHING

ROCK ISLAND TRANSFER & STORAGE CO.

Member of A. W. A.—N. F. W. A.

HAMMOND, IND.

Members N.F.W.A., Allied Van Lines

**JOHNSON
Transfer and Fireproof Warehouse**

MERCHANDISE AND HOUSEHOLD GOODS STORAGE
WAREHOUSE and OFFICE: 405 Douglas Str.

INDIANAPOLIS, IND.

"Coburn Service for Efficiency"

**HENRY COBURN
STORAGE and WAREHOUSE CO.**
Merchandise Storage, Distribution, Trucking

Leased Space—Offices—Low Insurance
Loans on Receipts

The Men Who Distribute
'Necco Sweets'
Read DISTRIBUTION & WAREHOUSING
and consult the Directory of Warehouses

INDIANA

DIRECTORY OF WAREHOUSES

Distribution and Warehousing
May, 1935

INDIANAPOLIS, IND.

Indianapolis Warehouse and Storage Co.

330 West New York St. Indianapolis, Ind.
Merchandise Warehouse, Brick, Sprinklered, 80,000
Square feet, private siding C.C.C. & St. L. Pool Car Dis-
tribution. Lease Space. Office Space.

Member of A.W.A. - Ind. W. A. - Associated Warehouses, Inc.

INDIANAPOLIS, IND.

Strohm Warehouse & Cartage Company

230 W. McCarty St. Telephone RI. 5513
General Merchandise Cold Storage. Pool Car Distribution and
Checking Out. All Merchandise on Check Out Cars Placed
on Platform Ready for Delivery.

CCC & St. L. R.R. Modern Truck Equipment.

INDIANAPOLIS, IND.

"Service That Satisfies"



TRIPP WAREHOUSE COMPANY
MERCHANDISE AND MACHINERY STORAGE
Centrally located in Shipping District
Private siding—C. C. C. & St. L. R. R.

TERRE HAUTE, IND.

Bauermeister Terminal Company

Private R.R. Track Capacity 21 Cars connecting with all Lines.
Merchandise Storage and Distribution a Specialty
Pool Cars Solicited

Motor Trucks for Store Door Delivery. Our clients do the selling—We
do the rest. U. S. Licensed and Bonded Canned Foods Warehouse
License No. 12-4.

CEDAR RAPIDS, IOWA

CEDAR RAPIDS TRANSFER & STORAGE CO.

FIREPROOF WAREHOUSE
ALL MODERN FACILITIES FOR EFFICIENT WAREHOUSING
AND DISTRIBUTION OF MDSE. AND H. H. GOODS.
MOTOR FREIGHT TERMINAL

For Reputable Freight Lines
DAILY SERVICE IN EVERY DIRECTION
FREE SWITCHING FROM ALL RAILROADS ENTERING CEDAR RAPIDS
Special Warehouse for Farm Machinery and Heavy Equipment

DAVENPORT, IOWA

Including Rock Island and Moline, Ill.

Ewert & Richter Express & Storage Co.

Fireproof Warehouse, on Trackage—in the Business and
Shipping District of Davenport.

Pool car distribution—Mdse. & H.H.G. with motor truck
service—direct from our Combined Rail and Truck Terminal.

A.W.A.—N.F.W.A. Phone Kan. 543

DES MOINES, IOWA

BLUE LINE STORAGE CO.

200-226 - Elm - Des Moines, Ia.

Merchandise and Household Goods Storage
Private Siding—Free switch from any R.R. entering
Des Moines

Members: A.W.A.—N.F.W.A.—I.W.A.—M.O.W.A.

DES MOINES, IOWA

Member American Chain of Warehouses

Fire
Proof
Ware-
house

MERCHANTS
TRANSFER & STORAGE CO.

9th
&
Mulberry

TRY OUR SUPERIOR SERVICE

35 years' warehousing nationally known accounts
gives you Guaranteed Service
Daily reports of shipments and attention to
every detail.

DES MOINES, IOWA

ESTABLISHED 1880

White Line Transfer & Storage Co.

120 So. FIFTH AVE. DES MOINES, IOWA

Moving: Packing: Shipping, Consolidators and Forwarders
Fireproof and Non-Fireproof Storage of

AUTOMOBILES, INFLAMMABLES, HOUSEHOLD GOODS
MERCHANDISE (All Kinds)

Private Sidings—Free Switching to and from All Lines Entering Des Moines
(Lowest Insurance)

Member: A. W. A., May. W. A., I. W. A., M. W. A.

MASON CITY, IOWA

Hub of Northern Iowa
and Southern Minnesota Territory

MASON CITY WAREHOUSE CORP.

Fireproof Storage of All Kinds

MASON CITY, IOWA

Served by: CANW, CRI&P, CGW, CMS&P & M&StL RAILWAYS

SIoux CITY, IOWA

"Our Customers Are Always Satisfied"

Iseminger's Storage and Cartage Co.

Your Choice for the Sioux City Territory
Transfer and Storage of Household Goods
Distribution of Merchandise

G. W. ISEMINGER, Mgr.

WATERLOO, IOWA

IOWA WAREHOUSE CO.

Fireproof Warehouse Motor Truck Service

Distributing and Warehousing All Classes of
Merchandise, Household Goods and Automobiles

HUTCHINSON, KANSAS

N. F. W. A.—A. W. A.

CODY

Transfer & Storage Co.

Fireproof Warehouse — Merchandise and Household Goods
Private siding — Free switching — Pool car distribution

KANSAS CITY, KANSAS

GRANDVIEW CLUB TRANSFER & STORAGE CO.

Modern distribution and warehousing service

Merchandise and household goods.

Reinforced concrete buildings. Private siding.

Free switching to and from all lines.

75,000 sq. ft. modern storage.

KANSAS CITY, KANSAS

Inter-State Transfer and Storage Company

FIREPROOF WAREHOUSE

Packing, Moving, Storing and Shipping

738-740 Armstrong

L. J. CANFIELD, Proprietor

Telephone Drexel 3430

TOPEKA, KANSAS

E. H. White, Pres. & Treas. E. F. Dean, Vice-Pres. A. G. Durall, Sec.
TOPEKA TRANSFER and STORAGE Co., Inc.
Established 1880
A.W.A. N.F.W.A.
FIREPROOF WAREHOUSES FOR MERCHANDISE & HOUSEHOLD GOODS
TWICE DAILY TRUCK SERVICE TOPEKA-KANSAS CITY
CITY-WIDE DELIVERY SERVICE
Private Switch Connections AT & SF, CRI & P. U.P. and M.P.
Member of American Chain of Warehouses

WICHITA, KANSAS

*A Modern Distribution and
Warehousing Service*

Brokers Office & Warehouse Co.
Murray E. Cuykendall, Gen. Mgr.

WHAT IT MEANS TO YOU

Not something for nothing, but doing what you want
done intelligently, economically and promptly.

AT YOUR SERVICE

WICHITA, KANSAS



Write or Wire

Cassell
TRANSFER & STORAGE CO.

WICHITA, KANSAS
Fireproof Storage and Sprinkler System

WICHITA, KANSAS

The Central Warehouse and Storage Corporation
135-141 North Santa Fe Street, Wichita, Kansas
Established 1914
Merchandise Storage Only

We have over 50,000 square feet storage space. Storage and distribution rates quoted on application. Reinforced steel and concrete, fire-proof building. Very low insurance rates. One hour watchman service. Located on the Wichita Terminal Association and the Atchison, Santa Fe railroad track. Chicago, Rock Island, St. Louis, San Francisco, Missouri Pacific Railroads. Own private track with facility to handle six cars. Local distribution by our own trucks. We specialize in pool car service.
"Courtesy and Service"

WICHITA, KANSAS

**MID-CONTINENT
WAREHOUSE COMPANY**
BONDED

East William St., Commerce to Santa Fe
**MERCHANDISE STORAGE
DISTRIBUTION**

**A SUPERIOR SERVICE REASONABLY
AND INTELLIGENTLY RENDERED**

CHAS. KNORR, Manager Telephone 3-5289
Forty years' experience in handling merchandise

WICHITA, KANSAS



LEXINGTON, KY.

**THE UNION
TRANSFER and STORAGE
COMPANY, Inc.**
**THREE LARGE
WAREHOUSES**

Fireproof and Non Fireproof. Centrally Located.
Warehouses on Private Sidings. Free Switching Charges.
DISTRIBUTION OF POOL CARS A SPECIALTY
MERCHANDISE AND HOUSEHOLD GOODS
WE FURNISH MOTOR TRUCKS and TEAM SERVICE
Member American Chain of Warehouses

LOUISVILLE, KY.

EMANUEL LEVI, Pres. W. L. STODGHILL, Gen. Mgr.
FIREPROOF STORAGE COMPANY, Inc.
308 W. LIBERTY ST.
MODERN FIREPROOF H. H. GOODS DEPOSITORY
MOVE—PACK—SHIP
Member: Mayflower Warehousemen's Association

LOUISVILLE, KY.

LAMPPIN WAREHOUSE COMPANY
1409 Maple St., Louisville, Ky.

Merchandise Warehouse 50,000 square feet,
Mill Construction, Sprinklered, private
siding P.R.R. Distribution of pool cars.

LOUISVILLE, KY.

Louisville Public Warehouse Company
25 WAREHOUSES \$750,000 CAPITAL

Louisville Member
AMERICAN CHAIN—DISTRIBUTION SERVICE, INC.
Gen'l Mdee. H. H. Goods

MONROE, LA.

Faulk-Collier Bonded Warehouses, Inc.
Operating



Bonded Brick Warehouses for Merchandise and Household
Goods Storage. Trucks for All Classes Drayage. Private
Sidings Missouri Pacific Ry. Switching Limits All Rail
Lines and River Connections. Our Traffic Department Will
Help Solve Your Distribution Problems.

Member of A.W.A. - N.F.W.A. - S.W.A. - A.V.L.

NEW ORLEANS, LA.

**Importers' Bonded Warehouse
and
Bienville Warehouses Corporation, Inc.**
R. W. DIETRICH, President
NEW ORLEANS, LA.

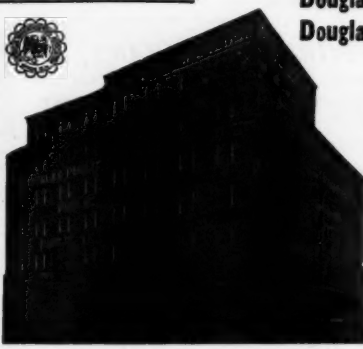
Complete Warehousing and Distribution Service for
New Orleans and its territory.
200,000 square feet of storage space with track room
for 30 cars at one placement. Licensed by and bonded
to the State of Louisiana, and the U. S. Government.
Office, 340 Bienville St.

Member A. C. W.—A. W. A.

NEW ORLEANS, LA.

**Commercial Terminal
Warehouse Company**
INCORPORATED**Modern 'Merchandise' Warehouses**A dependable agency for the
distribution of merchandise
and manufactured products.**Storage Cartage Forwarding Distributing
Bean Cleaning and Grading Fumigating**Office 402 No. Peters Street
NEW ORLEANS LOUISIANA

NEW ORLEANS, LA.

**Douglas Shipline Storage &
Douglas Public Service Corps.**New Orleans, La.
Sprinklered storage—
1,050,000 square feet.
Mfse. and Furniture.
Switch track capacity
—60 cars.
Nine warehouses con-
venient to your trade.
Loans made against
negotiable receipts.
Trucking Department
operating 55 trucks.
Insurance Rates 12c
to 22c.Represented by
Distribution
Service, Inc.
New York Chicago
San Francisco

NEW ORLEANS, LA.

GALLAGHER**TRANSFER AND STORAGE CO., INC.**

927-945 Magazine St.

Modern Fireproof Warehouse

You may depend on us to treat your clients as our own
when you call on us to serve them in New Orleans.

Members—N.P.W.A. and A.W.A.

NEW ORLEANS, LA.

NEW ORLEANS, LA.

2nd PORT, U. S. A.

All cement warehouses, low insurance, low handling costs.
Located on Mississippi River—Shipline connection.
Electrical unloading and piling devices provided to eliminate damage
in handling.

Excellent switching connections, with all lines entering New Orleans.

INDEPENDENT WHSE. CO., Inc.
New Orleans, La.

NEW ORLEANS, LA.

PELICAN STORAGE & TRANSFER
201 NORTH FRONT ST.**Complete Warehousing & Distribution Service.**
Low Insurance . . . Switch Track Facilities
Motor Freight Terminal . . . Fumigation

NEW ORLEANS, LA.

"LET US GIVE YOU THE BEST"

Standard Warehouse Company, Inc.

100 Poydras St.

New Orleans, La.

Twenty trucks and twenty cars can be handled simultaneously at our
800 feet of platform. Rail and water facilities are at our doors. More
than 100,000 feet of space, and every possible facility for storage,
drayage, distribution of pool cars. In fact, every branch of the
merchandise warehouse industry is at your immediate disposal.

Member of Southwest Warehouse and Transfermen's Association, Inc.

BANGOR, MAINE

McLAUGHLIN WAREHOUSE CO.

Established 1875

Incorporated 1918

General Storage and DistributingRail and Water Con-
nection—Private Siding

Member

American Chain of Ware-

houses

American Warehousemen's

Association

National Furniture Ware-

housemen's Association



BALTIMORE, MD.

For Details See Directory Issue
Distribution and Warehousing**BALTIMORE FIDELITY WAREHOUSE CO.**

T. E. WITTERS, President

Baltimore's Most Modern Merchandise Warehouses

Rail and Water Facilities

Pool Car Distribution—Storage—Forwarding

Private Siding Western Maryland Railway

BALTIMORE, MD.

Established 1895

THOS. H. VICKERY, Pres.

FIREPROOF WAREHOUSE

**BALTIMORE
STORAGE CO.**

Charles and 26th Sts.

Every facility for the handling of your shipments



BALTIMORE, MD.

CAMDEN WAREHOUSESOperating Terminal Warehouses on Tracks of
The Baltimore & Ohio Railroad Co.

Storage—Distribution—Forwarding

Tobacco Inspection and Export—Low Insurance Rates
Consign Via Baltimore & Ohio Railroad

BALTIMORE, MD.

Est. 1904

CENTRAL WAREHOUSE CO., Inc.

Rail Connections — Motor Trucks — Pool Car Service

Merchandise Storage and Distribution

Complete Branch Warehouse Service — Low Insurance

Located in Heart of Wholesale and Jobbing District

4 Blocks from Actual Center of City

515-525 W. Baltimore St. — 502-508 W. Redwood St.

BALTIMORE, MD.

Main Office: 400 Key Highway
Branch Offices: N. Y., Wash., Phila., Norfolk**DAVIDSON**
TRANSFER AND STORAGE CO.

Offering the most complete Moving, Hauling and Freight Service in Baltimore

Handling Distribution of Nationally Known Products for 36 Years

Fleet of Delivery Trucks Covering City and Vicinity Twice Daily

"U. S. Customs Bonded Drayman"

Member of Maryland Furniture Warehousemen's Ass'n

The Men Who Distribute

Federal MatchesRead DISTRIBUTION & WAREHOUSING
and consult the Directory of Warehouses

BALTIMORE, MD.

FIDELITY

STORAGE CO.

2104-6-8 MARYLAND AVE.

*Your Clients Efficiently Served
All Collections Promptly Remitted*

MOTOR FREIGHT SERVICE

Household Goods Pool Car Distribution Merchandise
*Maryland Furniture Warehousemen's Association
National Furniture Warehousemen's Association*

Baltimore's Modern Fireproof Warehouse

MARTIN J. REILLY, PRES.

A. BERNARD HEINE VICE-PRES.

BALTIMORE, MD.

J. NORMAN GEIPE,
Pres. & Treas.



Fireproof Storage Warehouses

General Offices: 524-530 West Lafayette Ave.

**HOUSEHOLD GOODS AND
MERCHANDISE**

**25 VANS QUICK DELIVERIES
LONG DISTANCE MOTOR FREIGHT**



BALTIMORE, MD.

McCORMICK

**WAREHOUSE
COMPANY**

**LIGHT AND BARRY
STREETS**

BALTIMORE, MD.

Concrete sprinklered warehouse centrally located. Private siding handling CL shipments via B&O, WM R.R. and PENN R.R. Low storage and insurance rates. Negotiable receipts issued. Pool car distribution. Motor truck service. Baltimore Port rates on CL via M & M T Co., from New England.

BALTIMORE, MD.

SECURITY STORAGE CO.

15 W. NORTH AVE.

**FIREPROOF MODERN WAREHOUSE
MOTOR VAN SERVICE
EFFICIENT AND COURTEOUS MANAGEMENT**

BALTIMORE, MD.

Satisfactory service guaranteed

**The Terminal Warehouse Company
of Baltimore City**

*has received, stored and distributed merchandise
since the year 1893*

The four warehouses operated by the Company have Pennsylvania Railroad sidings and one has also a steamship pier extending into the harbor.

BOSTON, MASS.

BANKERS WAREHOUSE COMPANY

24-32 Farnsworth Street

GENERAL MERCHANDISE

Free and Bonded Storage

N. Y., N. H. & H. Private Siding

Pool Car Distribution

Member Mass. W. A.

BOSTON, MASS.

SHIPPING TO BOSTON?

Use our complete facilities for the expert handling of household goods.

Modern equipment for lift vans and containers.

T. G. BUCKLEY COMPANY 690 DUDLEY ST., BOSTON
OPERATING DORCHESTER FIREPROOF STORAGE WAREHOUSE
Members—N.F.W.A.,—Mass. W. A.,—A.V.L.,—Can. W. A.

BOSTON, MASS.

CONGRESS STORES, INC.

38 STILLINGS ST.

PERSONAL
SERVICE

GENERAL
MERCHANDISE STORAGE

CENTRAL
LOCATION

Pool Car Distribution

Sidings on N. Y., N. H. & H. R. R.

Protected By
A.D.T. Service

Member
Mass. Warehousemen's Assn.

BOSTON, MASS.

Established 1896

PACKING MOVING

DUNN CO.

STORING SHIPPING

COMPLETE WAREHOUSING FACILITIES
CONTAINER SERVICE

45 Bromfield St. Member Mass. W. A. May W. A. 1175 Washington St.

BOSTON, MASS.

FEDERAL WAREHOUSE, INC.

34-38 MIDWAY ST., BOSTON, MASS.

Storage Capacity, 100,000 Sq. Ft.

Low insurance rate, direct track connection N. Y., N. H. & Hartford R. R. General Merchandise. Storage and distribution. Negotiable and Non-negotiable warehouse receipts. Space reserved for merchandise requiring non-freezing temperature.

Pool Car Shipments — Auto Truck Service
William F. Heavey, President and General Manager

BOSTON, MASS.

Hoosac Storage and Warehouse Company

Lechmere Square, East Cambridge, Mass.

FREE AND BONDED STORAGE

Direct Track Connection B. & M. R. R.

Lechmere Warehouse, East Cambridge, Mass.

Hoosac Stores, Hoosac Docks, Charlestown, Mass.

Warren Bridge Warehouse, Charlestown, Mass.

BOSTON, MASS.

CHARLES RIVER STORES
131 Beverly Street
Boston and Maine R. R.

ALBANY TERMINAL STORES
137 Kneeland Street
Boston and Albany R. R.

FRANCIS FITZ WAREHOUSE
39 Pittsburgh Street
N. Y., N. H. and H. R. R.

DIVISIONS OF

FITZ WAREHOUSE AND DISTRIBUTING CO.

**GENERAL MERCHANDISE
STORAGE**

Free and Bonded Space

-:-

Pool Car Service



Successors to

**FRANCIS FITZ CO. AND THE
GENERAL STORAGE DIVISION
OF QUINCY MARKET COLD
STORAGE AND WAREHOUSE
CO.**

*Rail and Motor Truck Deliveries
to All Points in New England*

BOSTON, MASS.

MERCHANTS WAREHOUSE CO. FISKE WHARF STORES

453 Commercial St. Boston, Mass.

Free & Bonded Fireproof Stores
Private Siding—Union Freight R. R.
A.W.A. American Chain of Warehouses, Inc. M.W.A.

BOSTON, MASS.

WIGGIN TERMINALS, Inc. 50 Terminal St. Boston (29) Mass. STORAGE

B. & M. R.R.
Mystic Wharf,
Boston

N. Y., N. H. & H. R.R.
E. Street Stores
South Boston

BOSTON, MASS.

Established 1830

D. S. WOODBERRY CO.
P. O. Box 57, North Postal Station, Boston
FORWARDERS & STORAGE
Pool Car Distribution Specialists for New England
Boston & Maine R. R. Siding

CAMBRIDGE, MASS.

GEORGE E. MARTIN, Pres.
Consign Your Lift Van Shipments to Us

CLARK & REID CO., Inc.
380 GREEN ST., CAMBRIDGE, MASS.
PACKING, STORING, SHIPPING OF HOUSEHOLD GOODS
OUR SERVICE INCLUDES ALL GREATER BOSTON

Member of {
Massachusetts Warehousemen's Association
Connecticut Warehousemen's Association
National Furniture Warehousemen's Association
Allied Van Lines, Inc.

FALL RIVER, MASS.

**BOSTON, MASS.
NEW BEDFORD, MASS.
PROVIDENCE, R. I.
NEWPORT, R. I.**
Direct R. R. Siding N. Y., N. H.
& H. R. R.

Keogh Storage Co.

Gen. Offices: Fall River, Mass.
Gen. Merchandise Storage
and Pool Car Distribution
Local and Long Distance Trucking.

FALL RIVER, MASS.

**NEW BEDFORD, MASS.
WATUPPA, MASS.**

Mackenzie & Winslow, Inc.

78 Fourth St.

General Merchandise

STORAGE AND DISTRIBUTION—POOL CAR SHIPMENTS
DIRECT N. Y., N. H. & H. R. R.—MEMBERS A. W. A.

PITTSFIELD, MASS.

T. ROBERTS & SONS, INC.
Local and Long Distance Furniture Moving

Fireproof Storage Warehouses
Household Goods Storage — Packing — Shipping
Merchandise Storage and Distribution
Pool Car Distribution

DIRECT R.R. SIDING B. & A. R.R. OR ANY R.R.

SPRINGFIELD, MASS.

Atlantic States Warehouse and Cold Storage Corporation

385 LIBERTY ST.

General Merchandise and Household Goods Storage
Cold Storage for Butter, Eggs, Poultry, Cheese, Meats
and Citrous Fruits

B. & A. Sidings and N. Y., N. H. & H. R. R. and
B. & M. R. R.

Member {
A. W. A.
N. W. A.

*Daily Trucking Service to
suburbs and towns within a
radius of fifty miles.*

SPRINGFIELD, MASS.

E. G. Mooney, Pres. J. W. Connelly, V.-Pres.

Hartford Despatch and Warehouse Co. 88 Birnie Avenue



STORAGE AND DISTRIBUTION SERVICE WITHIN 150-MILE
RADIUS. SPECIAL FACILITIES FOR STORING, MOVING,
PACKING AND SHIPPING OF HOUSEHOLD EFFECTS.
ALSO WAREHOUSES AT BRIDGEPORT AND HARTFORD,
CONN.

Member of A.W.A., N.F.W.A., A.C.W., A.F.L.



35 Years of Service

Nothing new about "D. & W." service.
It has been functioning for 35 years
and is known to most every warehouse
and shipper in the United States and
Canada. It is, in fact, international in
scope.

DETROIT, MICH.



Central Detroit Warehouse

Located in the heart of the wholesale and jobbing district, within a half-mile of all freight terminals. Modern buildings, lowest insurance rate in city.

Michigan Terminal Warehouse
Wyoming and Brandt Avenues

Modern concrete buildings, fully sprinklered, serving the west side of Detroit and the city of Dearborn. Specializing in heavy and light package merchandise and liquid commodities in bulk. Connected directly with every railroad entering the city.

Central Detroit Warehouse Co.

Fort and Tenth Streets, Detroit, Mich.

New York, N. Y.—250 Park Avenue—Room 826
Chicago, Ill.—53 W. Jackson Blvd.—Room 1010

DETROIT, MICH.



Ferry Ave., E. and Grand Trunk Railway

Local, regional and storage-in-transit service, offering every facility known to modern distribution.

New
Ultra-Modern
Plant

Trunk Line
Terminal
Complete Service

Continent-wide Connections

DETROIT, MICH.

Efficient, Dependable Warehousing

- Fireproof warehouse. Sprinklers. General and cold storage. Ideal location.
- Served by all rail lines entering Detroit. Inside trackage for 22 cars.
- Forty-four sheltered truck docks. Eleven high speed freight elevators.
- 1400-ft. wharf. Equipped to handle all commodities. Large marine house.

DETROIT HARBOR TERMINALS, INC.

4461 W. Jefferson Ave., Detroit, Mich.

DETROIT, MICH.

John F. Ivory Stge. Co., Inc.

MOVING—PACKING—SHIPPING
STORAGE—PRIVATE SIDING

6554 Hamilton Ave., Detroit, Mich.

DETROIT, MICH.

**FEDERAL
WAREHOUSE COMPANY**

Personal Service that is different

Pool car distribution by our own trucks

Lafayette 2070-2071

Try us and be convinced

DETROIT, MICH.

**JEFFERSON
TERMINAL WAREHOUSE**

Detroit 1900 E. Jefferson Ave. Michigan

**MERCHANDISE WAREHOUSING
and DISTRIBUTION**

Our reinforced concrete building, centrally located, assures very prompt delivery of goods to our patrons' customers. Desirable offices for rent. Quick service on pool cars. Prompt reshipments and city deliveries by our own motor trucks.

DETROIT, MICH.

**Henry & Schram Storage &
Trucking Company**

"The Warehouse of Service"

Merchandise Storage—General Trucking

Car Load Distribution

Private Siding on

Wabash—Canadian Pacific—Pennsylvania

Pere Marquette Railways

Cartage Agents Wabash and Canadian Pacific Railways

"Your Interests Are Always Ours"

1941-63 W. Fort Street

Detroit, Michigan

DETROIT, MICH.

EVERY LOAD INSURED

**UNITED VAN SERVICE
DETROIT REPRESENTATIVE
OWL MOVING & STORAGE CO.**
9400 MACK AVENUE

TURN YOUR MOVING AND STORAGE PROBLEMS OVER TO OUR EXPERIENCED ORGANIZATION. WE OWN AND OPERATE NEW, MODERN EQUIPMENT WITH ONE RESPONSIBILITY—OUR OWN.

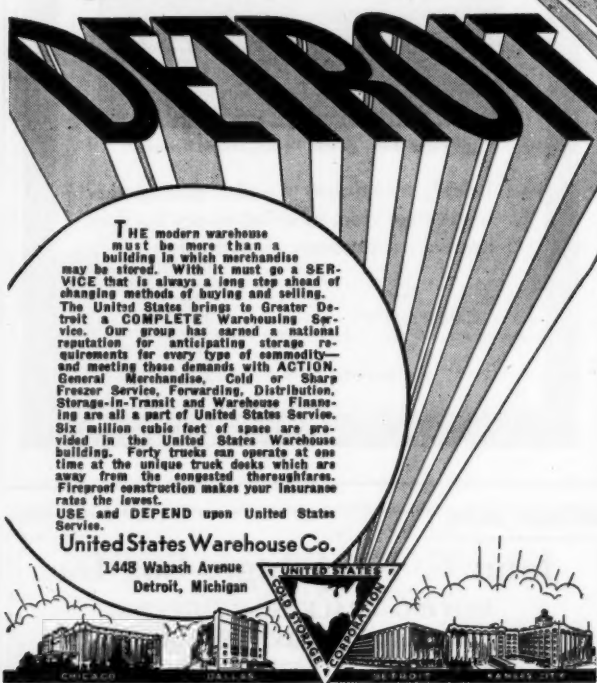
DETROIT, MICH.

"Located Heart Jobbing District"

RIVERSIDE STORAGE & CARTAGE CO.

Cass and Congress Sts., Detroit, Mich.
53 Years Satisfactory Service
HOUSEHOLD GOODS AND MERCHANDISE STORAGE
MOVING — PACKING — SHIPPING
PERSONAL SERVICE GUARANTEED
Members A. W. A.—N. F. W. A.

Thoroughly Serving
GREATER



DETROIT

THE modern warehouse must be more than a building in which merchandise may be stored. With it must go a SERVICE that is always a long step ahead of changing methods of buying and selling. The United States brings to Greater Detroit a COMPLETE Warehousing Service. Our group has earned a national reputation for anticipating storage requirements for every type of commodity—and meeting these demands with ACTION. General Merchandise, Cold or Sharp Freezer Service, Forwarding, Distribution, Storage-in-Transit and Warehouse Financing are all a part of United States Service. Six million cubic feet of space are provided in the United States Warehouse building. Forty trucks can operate at one time at the unique truck docks which are away from the congested thoroughfares. Fireproof construction makes your insurance rates the lowest. USE and DEPEND upon United States Service.

United States Warehouse Co.
1448 Wabash Avenue
Detroit, Michigan

CHICAGO DALLAS KANSAS CITY

DETROIT, MICH.

WAYNE WAREHOUSE CO.

Merchandise Storage and Distribution
1965 Porter St. at Vermont, Detroit, Mich.
Modern Concrete Building in Downtown Wholesale District on Michigan Central Railroad
Prompt, Efficient Handling and Distribution of Merchandise Accounts
L. J. McMILLAN, General Manager Member of Distribution Service, Inc.

DETROIT, MICH.

Wolverine Storage Company, Inc.
11850 E. Jefferson Ave.

STORAGE and MOVING
PACKING and SHIPPING

Members N. F. W. A.

FLINT, MICH.

CENTRAL WAREHOUSE CO.

WATER AND SMITH STS.

COMPLETE WAREHOUSING SERVICE

SPRINKLERED RISK G. T. TRUCKAGE

GRAND RAPIDS, MICH.

A COMPLETE WAREHOUSING AND
DISTRIBUTING SERVICE

COLUMBIAN STORAGE & TRANSFER Co.

Approximately 75% of All Commercial Storage
in Grand Rapids Handled Thru Columbian

LANSING, MICH.

"Center of Michigan"

FIREPROOF STORAGE CO.

H. H. HARDY, Manager
SERVICE—SAFETY—SATISFACTION—GUARANTEED
MOVE—PACK—CRATE—TRANSFER
FIREPROOF WAREHOUSE—PRIVATE SIDING
Merchandise Storage—Pool Car Distribution
Member of A. W. A.

LANSING, MICH.

LANSING STORAGE COMPANY

The only modern fireproof warehouse in
Lansing exclusively for household storage.
RUG—TRUNK—SILVER VAULTS

WE KNOW HOW
440 No. Washington Ave.
(Member of Allied Van Lines, Inc.)



SAGINAW, MICH.

CENTRAL WAREHOUSE CO.

GENERAL WAREHOUSEMEN AND FORWARDERS

MERCHANDISE DISTRIBUTION

SPRINKLER SYSTEM

Private Sidings M. C. R. R.

SAGINAW, MICH. Office
N. Michigan Ave.

MINNEAPOLIS, MINN.

ANCHOR WAREHOUSE, Inc.
BONDED - FIREPROOF WAREHOUSE

Exceptional Facilities—Modern Offices
Efficient Service, Free Switching from All Railroads
Ideally located in the heart of the Wholesale
and Shipping District
Offering a complete Warehousing and Distribution Service
Inquiries Solicited
730-740-750 Washington Ave., North

MINNEAPOLIS, MINN.

Established 1880

CAMERON**TRANSFER & STORAGE CO.**

734-758 Fourth St. No.

Conveniently located on CBQ & GN Ry. tracks.
Local and long distance motor truck service.

MINNEAPOLIS, MINN.

In Minneapolis—

**MINNEAPOLIS TERMINAL
WAREHOUSE COMPANY**

provides complete storage and distribution services
for the Northwest Market for many of the largest
National distributors.

In St. Paul and Minnesota Transfer—

**ST. PAUL TERMINAL WAREHOUSE
COMPANY**

offers the same progressive services and facilities under
the same management. We invite your inquiries.

KANSAS CITY, MO.

Merchandise Storage - Low Insurance Rates - Pool Car Distribution - Freight Forwarders and Distributors via rail or daily motor service to entire Southwest.

MEMBER OF
American Chain of Warehouse
American Warehousemen's
Association • Traffic Club
Chamber of Commerce

ADAMS
TRANSFER & ADAMS STORAGE CO.
"Surrounded by the Wholesale District"
UNION TRUCK TERMINALS
228-236
West Fourth St.

KANSAS CITY, MO.



UNITED WAREHOUSE CO.
Merchandise Warehouses
at
TWO BIG MARKETS
WICHITA, KANSAS ← → KANSAS CITY, MO.

KANSAS CITY, MO.

55TH YEAR

CENTRAL STORAGE CO.

Complete Merchandise Warehousing Service

Office—1422 ST. LOUIS AVE.

In Center of Wholesale and Freight House District

KANSAS CITY, MO.

2020-24 • WALNUT • ST.

WALNUT STORAGE

BONDED
WAREHOUSE
COMPLETE
FACILITIES

Member of ASSOCIATED WAREHOUSES, INC.

KANSAS CITY, MO.

Financing

CROOKS TERMINAL WAREHOUSES

"Kansas City's Finest Warehouses"

LOWEST INSURANCE RATES
BEST RAILROAD FACILITIES
IN THE HEART OF THE FREIGHT
HOUSE AND WHOLESALE DISTRICT

Operating
Brokers' Warehouse, Security Warehouse, Terminal
Warehouse

ST. JOSEPH, MO.

BONDED AND FREE

TERMINAL WAREHOUSES, Inc.

MERCHANDISE AND COLD STORAGE

LOW INSURANCE

MONEY ADVANCED ON STAPLE COMMODITIES

SEE DIRECTORY PAGE 220

KANSAS CITY, MO.

MONARCH STORAGE

DAN P. BRAY, Pres.

Main Office
1818 E. 31st St.

Branch Office
38th & Main

Member of Mayflower Warehousemen's Association

ST. LOUIS, MO.

COLUMBIA
TERMINALS
COMPANY

400 South Broadway

\$3,000,000.00

INVESTED . . . TO SERVE YOU

Merchandise storage with low insurance,
and guaranteed responsibility. Modern
Buildings. Large Fleet of up-to-date
trucks and trailers.

KANSAS CITY, MO.

W. E. Murray Transfer & Storage Co.

Modern Fireproof Warehouse with private siding on terminal tracks
connecting all Railroads.
Distribution and Storage Merchandise and H. H. Goods.
Pool Cars Promptly Handled and Reports Mailed in.
Motor Truck Service, City and Interurban.

LOWEST INSURANCE RATE IN KANSAS CITY
2015-17-19 Grand Ave. Kansas City, Mo.

ST. LOUIS, MO.

ESTABLISHED 1913

Unsurpassed Facilities for Handling
Household Goods, Fireproof Warehouse

Your Interests Will Be Safely Guarded

BENA. LANGAN
STORAGE & VAN CO.

5201 Delmar Blvd.

Member Chamber of Commerce, N. F. W. A.

KANSAS CITY, MO.

**THE ONLY WAY TRANSFER
& WAREHOUSE COMPANY**

Merchandise
Storage and Drayage
Pool Car Distributors

Parcel Post Forwarders
Track connections with all
railroads.

In the heart of the Freight House and Wholesale District
"30 years of continuous service"

KANSAS CITY, MO.

RADIAL WAREHOUSE COMPANY
POOL CAR

Shipments Forwarded Without Drayage Charge

MERCHANDISE

Storage and Distribution

We solicit your business and offer you SERVICE that is satisfactory at all times.

Member—American Warehousemen's Assn.
Midwest Warehousemen's Assn.
K. C. Warehousemen's Assn.

ST. LOUIS, MO.

**S. N. Long Warehouse**
ST. LOUIS

"Business Making Service"



KANSAS CITY, MO.

The H. H. SMITH STORAGE CO., Inc.

1015-19 MULBERRY ST.

General Merchandise Storage and Distribution

Office and Loft Space to Lease

Private Sidings—CBQ—U.P.Rys.

ST. LOUIS, MO.

St. Louis Mart, Inc.
Warehouse Division



Merchandise Storage
State and U. S. Customs Bonded
12th Blvd. at Spruce St. St. Louis, Mo.

ST. LOUIS TERMINAL WAREHOUSE CO.



Couples Station, including Warehouses Nos. 4 and 5, connected with Union Freight Station by tunnel -

Largest INDUSTRIAL WAREHOUSE ORGANIZATION IN ST. LOUIS

Five separate warehouses; strategically located to serve any industry conveniently and economically. All warehouses on track, with both carload and less-carload freight rates applying. Complete bonded and tax-paid facilities for domestic and imported wines and liquors.

American Chain of Warehouses, Incorporated.
Member of: Midwest Warehouse and Transfermen's Assn.
St. Louis Merchandise Warehousemen's Assn.

New York Office
230 Park Avenue
Phone 2-1235

GENERAL OFFICES
501 Clark Avenue
St. Louis, Mo.

Chicago Office
53 W. Jackson
Harrison 1496



ST. LOUIS TERMINAL WAREHOUSE CO.

HASTINGS, NEBR.



1876 1934
Borley Storage & Transfer Co., Inc.
Pool Car Distribution
FIREPROOF BONDED
FREIGHT TRUCK CONNECTION TO ALL
OF THE CENTRAL PART OF THE STATE

The Men Who Distribute

Purina Whole Wheat Flour

Read DISTRIBUTION & WAREHOUSING
and consult the Directory of Warehouses

LINCOLN, NEBR.

100,000 Sq. Feet
Lincoln, Nebraska
301 N. 8th Street

35,000 Sq. Feet
Grand Island, Nebraska
311 W. 4th Street

SULLIVANS

1889 45 Years of Continuous Service 1935

Merchandise and Household Storage—Pool Car Distribution
General Cartage—Trucking—Assembling

We operate Thirty Trucks and have connections to all points in the State.

Our buildings are clean, both Fire and Non-Fireproof, located on the lines of the O. B. & Q.—Mo. Pacific and Union Pacific with all other lines entering either city, absorbing switching.

We are Bonded by the State—Our rates are reasonable. We solicit your business and guarantee satisfaction. Investigation invited.

SULLIVANS

Transfer & Storage Co. Grand Island Storage Co.
Lincoln, Nebr. Grand Island, Nebr.



LINCOLN, NEBR.

UNION TERMINAL WAREHOUSE

Concrete fireproof construction. 215,000 sq. ft. storage; 3000 sq. ft. office and display space. Consign shipments any railroad. Free switching. Low insurance rates. See D. & W. annual Directory.

COMPLETE WAREHOUSING SERVICE

Member: A. C. W.

OMAHA, NEBR.

BUSHMAN WAREHOUSE & STORAGE CO.

UNITED STATES GOVERNMENT AND
STATE BONDED WAREHOUSE
RECEIVING, FORWARDING AND FINANCIAL AGENT
1013-15-17-19 Leavenworth St.

Phone Jackson 1110
SPRINKLERED BUILDING WITH BEST TRACKAGE
AND STORAGE FACILITIES IN OMAHA

OMAHA, NEB.

R. J. MAYER, PRESIDENT

CENTRAL STORAGE & VAN CO.

MAIN OFFICE... 1101-13 JACKSON ST.

COMPLETE WAREHOUSING SERVICE

FIREPROOF WAREHOUSE... TRACKAGE... MOTOR TRUCKS

OMAHA, NEBR.

Member of N.F.W.A.—A.W.A.

FORD BROS
Van & Storage Co.

OMAHA, NEB.

GORDON
Storage
Warehouses, Inc.

Merchandise and Household Goods

Four modern, sprinklered warehouses, located on trackage. We handle pool cars, merchandise and household goods. Trucking service. Let us act as your Omaha Branch.

Main Office, 219 N. 11th St.

Member: A.W.A.—N.F.W.A.

OMAHA, NEB.

KNOWLES STORAGE CO.

Member: American Chain of Warehouses, Inc.

9th and Farnam Sts.

MERCHANDISE — HOUSEHOLD GOODS

Complete Warehousing and Distribution Service.

Fireproof Building . . . Trackage . . . Motor Trucks.

OMAHA, NEBR.

Pacific Storage & Warehouse Co.

1007-9-11 JONES STREET

Merchandise Storage and Distribution — Pool cars solicited
Private Siding — Motor Trucks

Our Warehouse is in the Center of the Jobbing and Business District.

SERVICE THAT SATISFIES IS OUR MOTTO

Members of the Mid-West Warehousemen's Ass'n, American Warehousemen's Ass'n

OMAHA, NEB.

THE TERMINAL WAREHOUSE CO.

MAIN OFFICE 1013-23 JONES ST.

COMPLETE WAREHOUSING SERVICE

MEMBER A.W.A. N.W.A. A.V.L. N.W.A.

MANCHESTER, N. H.

Make Our Warehouse Your Branch Office for
Complete Service in New Hampshire

NASHUA, N. H.

McLANE & TAYLORCONCORD, N. H. Bonded Storage Warehouses
Offices 624 Willow St.General Merchandise Storage & Distribution, Household
Goods, Storage, Cold Storage, Unexcelled Facilities.

Pool Car Distribution

Direct R. R. Siding, Boston & Maine R. R.

ASBURY PARK, N. J.

ANDERSON BROS.

BRADLEY BEACH, N. J.

Storage Warehouses

RED BANK, N. J.

Gen. Office: 51-53 Mechanic St.
RED BANK

Branch Warehouse, Bradley Beach

General Merchandise and Household Goods Storage
and DistributionDirect Penn. R.R. Siding Asbury Park and Bradley Beach
Member of N.F.W.A.

EAST ORANGE, N. J.

Established 1887 R. T. BLAUVELT, President

Lincoln Storage WarehousesBloomfield
Caldwell
Glen Ridge
Irvington

Office, 75 Main Street

Maplewood
Montclair
Newark
Summit

—Serving—

All the Oranges

Agents for Aero Mayflower Transit Company.

HACKENSACK, N. J.

RUTHERFORD, N. J. WESTWOOD, N. J.

GEO. B. HOLMAN & CO., Inc.

STORAGE SHIPPING PACKING

HOUSEHOLD GOODS

Most Modern Equipment in North Jersey

Complete Warehouse Service

Motor Vans for Local and Long Distance Hauling

Members N. J. F. W. A. and N. F. W. A.

Agent: Allied Van Lines, Inc.

JERSEY CITY, N. J.

**K. & E. DeLuxe Padded Van Co., Inc.**

Up-to-date facilities for lift van consignments

Four story modern storage facilities, private siding
on central railroad, distribution of pool car shipment,
and a fleet of large padded vans assure speedy delivery.

Main Office, 79 Kearney Ave., Jersey City, N. J.

Branch Office, 1775 Broadway, New York City
Telephone Night and Day, Delaware 3-5250

NEWARK, N. J.

STORAGE

DISTRIBUTION

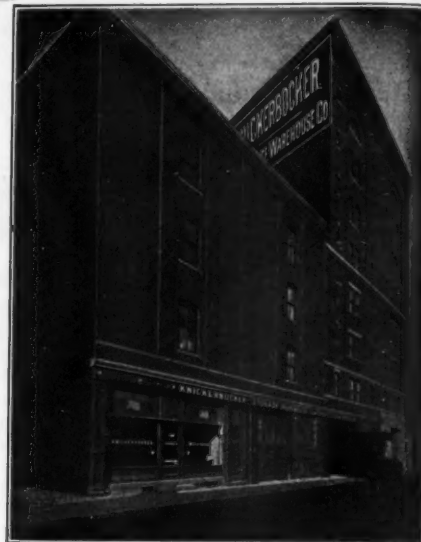
ESSEX WAREHOUSE COMPANY

600 Ogden St., Newark, N. J.

Members—A.W.A.—N.J.M.W.A.

We are equipped to perform every service you require. Sprinklered
building . . . Penn. R. R. siding . . . Private pier. Daily over-night
truck deliveries within 100 miles.

NEWARK, N. J.

Fine,
Clean,
New,
H H G
Vaults.
Central
Location.
Equip-
ment
for
handling
your
consign-
ments
promptly
and
intelli-
gently.**Knickerbocker Storage
Warehouse Company**

Newark's Leading Warehouse

96 to 106 Arlington Street

John Mulligan, Pres.

Wm. Mulligan, Vice-Pres.

James E. Mulligan, Sec. and Mgr.

MOVING, PACKING, DISTRIBUTION, SHIPPING, MOTOR
EQUIPMENT

Member N. F. W. A. and N. J. F. W. A.

NEWARK, N. J.

**Lehigh Warehouse &
Transportation Co., Inc.**

98-108 Frelinghuysen Ave., Newark, N. J.

Storage and Distribution of
General Merchandise.

Lehigh Valley Railroad siding.

We operate our own fleet of Motor
Trucks making store door
delivery within a radius
of 30 miles.

NEW BRUNSWICK, N. J.

SISSER BROS., INC.

New Fireproof Storage Warehouse

Gen. Offices: 25 Livingston Ave.

New Jersey's Largest Moving and Distribution
Specialists

Member N.J.F.W.A. and N.F.W.A.

Somerville, N. J.
128-136 E. Main St.Plainfield, N. J.
18 Grove St.New York City
80 Day St.

SOUTH ORANGE, N. J.
NEWARK, N. J.



"Serving Metropolitan New Jersey"
SOUTH ORANGE STORAGE CO., INC.

STORAGE - MOVING - SHIPPING - LIFT VANS

— MEMBER —

N.J.F.W.A., N.F.W.A., A.V.L., N.J.R.C.A.
219 Valley St., South Orange 2-4000

TRENTON, N. J.

Petry Express & Storage Co.

(INCORPORATED)

STORAGE WAREHOUSES
MERCHANDISE and HOUSEHOLD GOODS
MOVERS—PACKERS—SHIPPERS
MOTOR VAN SERVICE

Carloads Distributed. Manufacturers' Distributors.
Members—N. F. W. A.

ALBANY, N. Y.

**Albany Terminal & Security
Warehouse Co., Inc.**

Main office: 1 Dean Street

Storage for every need. Pool cars a specialty. Available storage space for rent if desired. Direct track connections with all railroads running into Albany.

Member of
American Chain of Warehouse
American Warehousemen's Association

ALBANY, N. Y.



**CENTRAL RAILWAY TERMINAL
& COLD STORAGE CO. INC. ALBANY, NY**

Colonie and Montgomery Sts.

Telephone 3-4101

General Merchandise—Cooler and sharp freezer Cold Storage; also U. S. Custom Bonded space available. Office and storage space for lease. Fireproof construction with very low insurance rate. Storage in Transit privileges. All classes of modern warehouse and distribution service rendered.

ALBANY, N. Y.

Hudson River Storage & Warehouse Corp.
(Bonded)

STORAGE and DISTRIBUTION
Private Siding. Sprinklered.

AMSTERDAM, N. Y.

GEORGE H. MAUS, INC.
STORAGE WAREHOUSES

25-35 Hamilton St., Amsterdam, N. Y.

PUBLIC STORAGE, SPRINKLER SYSTEM
LOWEST INSURANCE

On main line of N.Y.C., West Shore R.R., and New York
State Barge Canal. U. S. Customs Bonded

BINGHAMTON, N. Y.

JOHN B. SOUTHEE, Inc.
Moving — Trucking — Storage
Long Distance Moving

Member of
National Furniture Warehousemen's Association
Central New York Warehouse Association
Chamber of Commerce

Phone—Bingh: 4391-4392 Office: 178 State Street

BROOKLYN, N. Y.

**EAGLE WAREHOUSE
AND STORAGE COMPANY**

28 Fulton Street Brooklyn, N. Y.

We specialize in shipments from correspondents, collections handled. Our strictly fireproof building is ideally equipped for storage of household goods and valuables. We pack goods for shipment, and have a fleet of vans for prompt deliveries.

BROOKLYN, N. Y.

Established 1890

THOS. F. HEALEY & SONS, Inc.

FIREPROOF WAREHOUSES

Offices: 2521-23-25 Tilden Ave.

Specializing in Pacific Coast Shipments.
Lift Vans and Pool Cars

Door to Door Quotations. Collections Remitted at Once

BROOKLYN, N. Y.

Long Island Storage Warehouses, Inc.

Nostrand and Gates Aves., Brooklyn, N. Y.

FIREPROOF THROUGHOUT

Largest and Oldest Established Warehouses in Brooklyn
Modern in Every Respect

Member of A.W.A.—N.F.W.A.—N.Y.F.W.A.—A.I.W.

BROOKLYN, N. Y.

John D. White, Pres. Chas. D. Strang, V. Pres.
R. C. Kulp, Treas.

Chas. D. Strang, Inc.

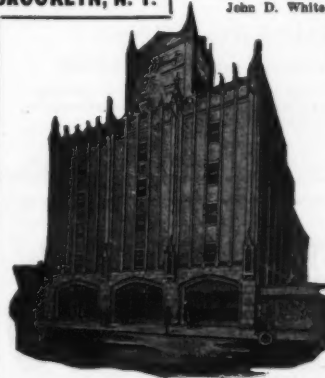
Fireproof Warehouses
Established 1888

Strang's Service Secures
Satisfaction

Consign Your Shipments
In Our Care

356-360 Coney Island Ave.
187-195 S. Portland Ave.
Brooklyn, N. Y.

Member N. F. W. A.
N. Y. W. A.



BROOKLYN, N. Y.

WILLIAM H. STRANG WAREHOUSES
Inc.

Established 1875
900-910 Atlantic Avenue 892-898 Atlantic Avenue
Packing, Shipping, Moving and
Storage of Household Goods
N. Y. F. W. A.—N. F. W. A.

BUFFALO, N. Y.

Knowlton Warehouse Co.

50 Mississippi Street, Buffalo, N. Y.
POOL CAR DISTRIBUTION
MERCHANDISE STORAGE
PRIVATE SIDING

BUFFALO, N. Y.

Let us care for your needs in Buffalo
Larkin Terminal Warehouse

Specializes in handling pool cars. No cartage on railroad shipments. Lowest insurance rates. Stores autos and general merchandise.
Government Bonded Warehouse
For further information write J. E. Wilson, Traffic Manager

BUFFALO, N. Y.

THE MARKET TERMINAL WAREHOUSE

SCHOELLKOPF AND CO., Inc.
Offices 100 Perry St.
IN THE HEART OF THE WHOLESALE DISTRICT
GENERAL MERCHANDISE STORAGE & DISTRIBUTION
POOL CARS DISTRIBUTED
Private Sidings, Lehigh Valley and all Railroads
Member of the A.W.A. and Associated Warehouses, Inc.

BUFFALO, N. Y.

GENERAL MERCHANDISE—COLD STORAGE
WAREHOUSE

Cargo-Handling
Rail-Lake and Barge
Terminal
96 Car Track
Capacity
1500 Feet Private
Dock



Financing—
Distribution
Auto Dealers
Warehousing
Service
Office and
Factory Space

TERMINALS & TRANSPORTATION
CORPORATION

275 FUHRMANN BLVD. BUFFALO, N. Y.

ELMIRA, N. Y.

JOSEPH BIMBERG SONS
STORAGE WAREHOUSE and TRANSFER

On main line Lacka-Erie-Penna.—L.V.R. Rs. Free Switching. **WE ARE SPECIALISTS** on Storage and Distribution of Pooled cars. Let us **SERVE** you and Prove it.

Members Am. Chain of Warehouses & A.W.A.

WE SHIP SUDDEN.

Nathan Bimberg, Gen. Mngr.

ELMIRA, N. Y.

A. C. RICE STORAGE CORP.

2—WAREHOUSES—2

MERCHANDISE—HOUSEHOLD GOODS

Pool Cars—Truck and Van Service



MEMBER

A.W.A.—N.F.W.A.—ALLIED VAN LINES



FOREST HILLS, L. I., N. Y.

**Forest Hills Fireproof Storage**

Austin St. and Herriek Ave.

Storage and Shipping of Household Goods Exclusively

Serving Forest Hills, Elmhurst, Kew Gardens, Richmond Hill, Jackson Heights.

GREAT NECK, L. I., N. Y.

E. C. J. McShane, Pres.

BAYSIDE
DOUGLASTON
LITTLE NECK
MANHASSET
PORT WASHINGTON

**Great Neck Storage Co., Inc.**

Offices Cuttermill Road

New Fire Proof Warehouse
for

Household Goods—Works of Art
Individual Rooms

Members B.&L.I.S.W.A., N.Y.F.W.A., N.F.W.A.

HEMPSTEAD, N. Y.

We solicit your patronage for the following towns:

FREEPORT
LYNBROOK
ROSLYN
HICKSVILLE
MINEOLA
WESTBURY
GLEN COVE
AMITYVILLE

GLEN HEAD
BAYSHORE
PORT WASHINGTON
ROCKVILLE CENTER
SEA CLIFF
LONG BEACH
MERRICK
VALLEY STREAM

NEW HYDE PARK
OYSTER BAY
WHEATLEY HILLS
GARDEN CITY
BALDWIN
ROOSEVELT
PLANDOME

HEMPSTEAD STORAGE
CORPORATION

237 MAIN STREET, HEMPSTEAD,
L. I., N. Y.

JACKSON HEIGHTS, L. I., N. Y.

ASTORIA, L. I.
CORONA, L. I.
LONG ISLAND CITY, L. I.
FLUSHING, L. I.
REGO PARK, L. I.
WOODSIDE, L. I.

FRED G. KELLEY INC.

Fireproof Storage Warehouse

37-39 31st ST., JACKSON HEIGHTS

HOUSEHOLD GOODS : STORAGE

PACKING : SHIPPING

POOL CAR DISTRIBUTION

Members: N.F.W.A., N.Y.F.W.A. and N.Y.S.W.A.

JAMAICA, L. I., N. Y.

Route Shipments for Long Island To
JAMAICA
STORAGE WAREHOUSE CO.

FIREPROOF

Wrapping

Packing

Crating

Shipping

Specializing in Packing and Shipping
High Grade Furniture and Art Objects

Adjacent to Largest R. R.
Terminal on Long Island

9329-41 170th Street at
Long Island Railroad

Telephone—Jamaica 6-1035-1036



KEW GARDENS, L. I., N. Y.

Telephones, Richmond Hill 2-2871, Cleveland 3-3160-4530

Kew Gardens Storage Warehouse, Inc.
Motor Vans, Packing, Shipping

8636-38 122nd Street
Semi Fireproof

Jamaica Ave. cor. 120th Street
Fireproof

Richmond Hill, N. Y.

NEW ROCHELLE, N. Y.



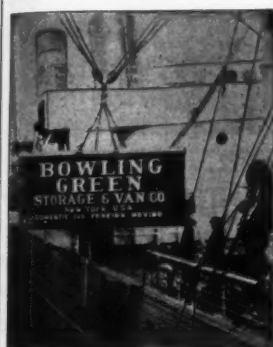
Moving, Packing Storing, Shipping
O'Brien's Fireproof Storage Warehouse, Inc.
Packers and Shippers of Fine Furniture
and Works of Art
Also Serving
New Rochelle, Pelham, Larchmont, Mamaroneck, White
Plains, Scarsdale, Hartsdale. Send B/L to us at
New Rochelle.

NEW YORK, N. Y.

Abington Warehouses, Inc.

Merchandise Warehousing and Distribution in the
Metropolitan District
Centrally Located—250,000 Square Feet—Prompt Service
514-520 West 36th St.

NEW YORK, N. Y.



**Bowling Green
Storage & Van Co.**

Foreign and Domestic
Removals

**STORAGE
PACKING**

Office, 8-10 Bridge St.
Warehouse, 250 West 65th St.

NEW YORK, N. Y.

BUSH TERMINAL

Gen. Offices 100 Broad St., New York City
Warehousing—Distribution—Manufacturing Facilities
Cold Storage—Fumigation
SHIP-SIDE, RAIL-SIDE, MOTOR TRUCK

NEW YORK, N. Y.

Byrnes Brothers Warehouses, Inc.

ESTABLISHED 1870



Two centrally located modern fire-
proof warehouses, adjacent to all rail-
roads, for prompt and economical
handling of your shipments.

Sixty two years of dependable service
is your guarantee in selecting us as
your New York repre-
sentative.

305-307 East 61st Street

Member: N. Y. F. W. A.,
N. Y. S. W. A., N. Y. V. O. A.



NEW YORK, N. Y.

FIREPROOF WAREHOUSES



**Day & Meyer
Murray & Young, Inc.**

PORTOVAULT
STEEL VAULT STORAGE
1166 SECOND AVE., NEW YORK



NEW YORK, N. Y.

Fireproof Storage Warehouses

**Dunham & Reid
Inc.**

The storing, packing, moving and shipping of Household Goods and
Art objects is attended to on a basis of quality. Dunham & Reid
Service surrounds the shipper at all times with a greater margin
of Safety and Security. Low insurance rates. Prompt remittances.
Located in the heart of New York.
216-218 East 47th Street New York City
Members of N. Y. F. W. A., N. Y. F. W. A., V. O. A.

NEW YORK, N. Y.

Ellingers Fireproof Warehouse, Inc.
Merchandise Warehousing and Distribution
in the Metropolitan District

503-505-507 Hudson St., New York City
Office Space and Desk Room to Rent
Domestic, Export and Import Trucking

NEW YORK, N. Y.

THE GILBERT STORAGE CO., INC.

Specialists in Fuel Car Distribution—Warehouses Located on East and West
Side—Fireproof Storage
Formerly HARLEM STORAGE WAREHOUSE CO., INC.
Executive Office, 38 W. 65th St. West Side Warehouse, 38 W. 65th St.
East Side Warehouse, 211 E. 100th St.
Agent for ALLIED VAN LINES, INC. Nation-wide Long
Distance Moving. A National Organization owned and op-
erated by the leading storage warehouse companies in
the United States.
Members N. Y. F. W. A., N. Y. F. W. A. and N. Y. S. W. A.

NEW YORK, N. Y.

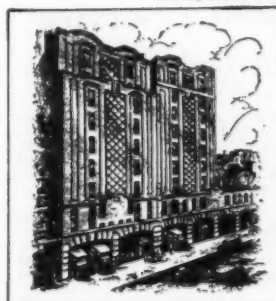
SEND YOUR BRONX AND WESTCHESTER SHIPMENTS TO
**Globe Fireproof Storage Ware-
house Co., Inc.**

New Fireproof Storage Warehouse
Offices: 810-812 East 170th St.
Members N.F.W.A., N.Y.F.W.A.



NEW YORK, N. Y.

William F. Hahn, Pres. Fred J. Hahn, Sec. & Treas.
STORAGE—MOVING—PACKING
We Specialize in Lift Van Shipments



WEST SIDE BRANCH AND GEN. OFFICE
100-120 WEST 107th ST., N. Y. C.

HAHN BROS.

**FIREPROOF
WAREHOUSES, INC.**
106-120 WEST 107th STREET
— AND —
231-235 EAST 55th STREET
NEW YORK CITY

Efficient and Capable Organization
Modern Fireproof Buildings
Personal Supervision
Member Mayflower Warehousemen's
Association

NEW YORK, N. Y.

Up-to-the-minute perpetual inventory.
Current balance-in-stock immediately available.

**LEHIGH HARLEM RIVER
TERMINAL WAREHOUSE, Inc.**

385 Gerard Ave., at East 144th St. and Harlem River
GENERAL MERCHANDISE
AND NEW AUTOMOBILE STORAGE

Central and convenient location adjacent to up-town grocery center. Lehigh Valley
Railroad tracks in the building. Concrete fireproof construction. Sprinkler
system. Clean floors. Orderly arrangement. Night and ventilation on four
sides. Lowest insurance rate in the Bronx—15¢ per \$100. Prompt service.

NEW YORK, N. Y.

T. I. McCORMACK TRUCKING CO., Inc.

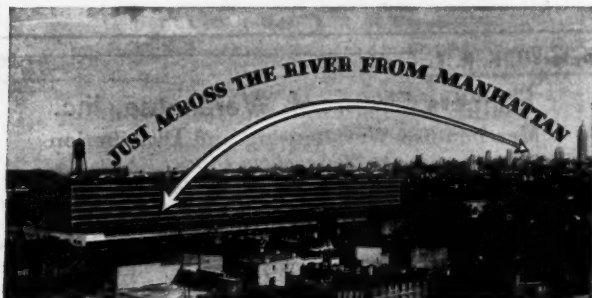
261 ELEVENTH AVE. AT 27th ST.

Service That Has Stood The Test
GENERAL MERCHANDISE STORAGE AND DISTRIBUTION
IN THE VERY CENTER OF NEW YORK

3 Railroad Sidings: N. Y. C. R. R., Erie R. R., Lehigh Valley
Fleet of Motor Trucks for Every Kind of Transportation Needs
Daily Metropolitan Deliveries Custom House License No. 111
Liquor Delivery Permit

LACKAWANNA TERMINAL WAREHOUSES, INC. JERSEY CITY, N. J.

(Six hundred feet from the Manhattan Tunnel Plaza)



SUPERIOR DISTRIBUTION

A stock of your products carried in our Terminal is within 24 hours of your customer's door at any principal point between Boston and Washington, D. C.
 ♦ Traffic experts route your shipments via dependable lines at minimum charges. ♦ Side track facilities and L. C. L. Freight station in same building. ♦ Coastal Steamship connections, eliminate unnecessary cartage expense. ♦ Direct Motor Truck Store Door Delivery Service covering wide area. ♦ Pool Car Distribution.
 ♦ Modern Building and Minimum Insurance Rates.

NEW YORK, N. Y.

Offering a Superior Service at a Reasonable Price

Fireproof Vaults
Electric Van Service
Cold Storage
Separate Vans
Safe Deposit Vaults

Maintaining a modern fireproof building; easily accessible; storing household goods of every kind in separate fireproof rooms, vaults or galleries which are constructed to properly care for goods of value.

Special vaults for silverware and valuables; also vaults of arctic chill for storage of furs, tapestries, rugs, clothing or any other article of value that requires safeguarding from moth ravages.

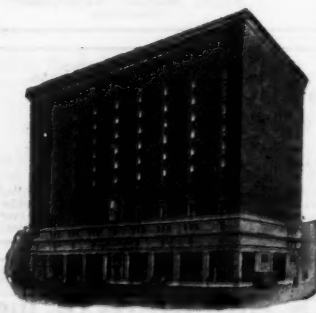
Special van equipment for transporting goods to and from warehouse and home or out-of-town. Also house-to-house moving.

Fumigating tanks to destroy moth or insects in furniture, rugs or bedding.

Special vans for shipments of household goods to all parts of the world.

Dead storage for automobiles. Batteries are cared for on premises.

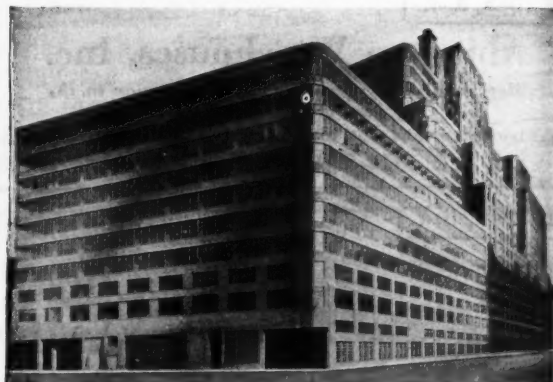
Our experience of 50 years guarantees satisfactory performance.



Lincoln Warehouse Corporation
1187 to 1201 Third Ave., at 69th and 70th Sts.

Alexander Gaw, Vice-President and General Manager
Horace Roberts, Superintendent of Warehouses

STARRETT LEHIGH BUILDING



Look Before You Locate

Starrett Lehigh Building, bounded by West 26th and West 27th Streets and 11th and 13th Avenues, New York City, affords an excellent location for manufacturing and distribution.

IT HAS —

- Lehigh Valley Railroad freight terminal on street level. Freight elevators direct to platform in rail yard.
- Truck elevators to all floors with convenient truck pits, offering street floor facilities throughout the building.
- Floor areas, 52,000 to 124,000 sq. ft. Smaller units may be leased.
- Low insurance rates.
- Live steam for manufacturing purposes.
- Fast passenger elevators.
- Restaurant and barber shop.

INVESTIGATE THE ADVANTAGES OF THIS BUILDING

You will find it easily adaptable as your Eastern manufacturing and distributing plant, sales and display offices. It is situated on wide thoroughfares in the center of Manhattan.

Nationally-known concerns, already occupants of the building, have been able materially to lower their New York operating costs and at the same time increase their efficiency. You, too, can save here.

Starrett Lehigh Building

D. R. CROTSLEY, Manager, 601 West 26th Street
Telephone: Chickering 4-0297

NEW YORK, N. Y.

Storage, Distribution and Freight Forwarding
from an Ultra-Modern Free and Bonded
Warehouse.

IDEALLY LOCATED
IN THE VERY CENTER OF NEW YORK CITY
Adjacent to All Piers, Jobbing Centers
and The Holland Tunnel

Unusual facilities and unlimited experience in forward-
ing and transportation. Motor truck service furnished
when required, both local and long distance. Lehigh
Valley R.R. siding—12 car capacity—in the building.
Prompt handling—domestic or foreign shipments.

MIDTOWN WAREHOUSE, INC.

Starrett Lehigh Bldg.
601 West 26th St., N. Y. C.

ROCHESTER, N. Y.

Established 1893

Storage of Automobiles and General Merchandise
N. Y. C. R. R. 10 Car Capacity, Private Siding
Pool Car Distribution Motor Service
Heated Throughout Sprinklered Low Insurance Rate

MONROE WAREHOUSE COMPANY, Inc.

Offices: 1044 University Ave.
Member of A. W. A.

ROCHESTER, N. Y.

ROCHESTER
STORAGE WAREHOUSES, Inc.

26 N. Washington St.
MERCHANDISE STORAGE • DISTRIBUTION AND
FORWARDING • STORE DOOR DELIVERY

NEW YORK, N. Y.

J. G. SILBERBERG, Pres.

ROYAL WAREHOUSE CORP.
GENERAL MERCHANDISE
STORAGE—DISTRIBUTION—POOL CARS

Located in the Hub of Greater New York
Crane Equipped

Long Island City

New York

SCHENECTADY, N. Y.



Schenectady Storage and Trucking
McCormack Highway
Transportation

Offices: 160 Erie Blvd.

General Merchandise Storage and Distribution
Pool Car Distribution Household Goods
Storage and Moving Long Distance Trucking

NEW YORK, N. Y.



SANTINI BROS., INC.

Serving Greater New York and All Points in Westchester
County

MOVERS—PACKERS—SHIPPERS

General Offices: 1405-11 Jerome Ave.—Tel.: Jerome 6-6000
Four Fireproof Warehouses

3,000,000 CUBIC FEET—POOL CAR DISTRIBUTION

SYRACUSE, N. Y.



Fireproof Throughout
Flagg Storage Warehouse Co.
SYRACUSE, N. Y.

Protected by Automatic Sprinkler

Consign your Household Goods Shipments in our care
MOVING — STORAGE — PACKING — SHIPPING
Mdse. Storage Private Siding Pool Cars Handled

NEW YORK, N. Y.

Seaboard Storage Corporation

New York Office: 99 Wall St.

Distribution in the Metropolitan Area.

Steamship facilities — Railroad connections — Motor
truck distribution — One Responsibility.

Port Newark Terminal Brooklyn Terminal
Foot of Doremus Ave. Foot of Smith St.

NEW YORK CITY, N. Y.

WARWICK-THOMSON CO.

507-517 West 39th St., New York City

STORAGE—TRUCKING—DISTRIBUTION
POOL CARS—CAR LOTS AND LESS CAR LOTS
STORE DOOR DELIVERY & FORWARDING

ROCHESTER, N. Y.

George M. Clancy Carting Co., Inc.

Storage Warehouse

55-55 Railroad Street

General Merchandise Storage • Distribution

Household Goods Storage • Shipping

Pool Cars Distributed and Reshipped

Direct R. R. Siding N. Y. Central
in the Center of Rochester

ROCHESTER, N. Y.

SAM GOTTRY CARTING CO.

For Efficient Distribution in the Rochester Trading Zone

Gen. Offices, 47 Parkway

General Merchandise Distribution—Household Goods—Pool Cars
Distributed—Heavy Duty Hauling, Machinery, Etc.—Long
Distance Moving—Correspondence Solicited

SYRACUSE, N. Y.

A Sales PLUS in
New York State

Selling in New York State
is easier and more profit-
able when you offer your
customers the complete
service available through
our modern warehouse.
Write for money-saving
suggestions.

Member AWA, ACW
NFWA, AVL

Great Northern Warehouses, Inc.

348-360 W. Fayette St., Syracuse, N. Y.

SYRACUSE, N. Y.

DISTRIBUTION **KING** STORAGE

SINCE 1897



MERCHANDISE

HOUSEHOLD
GOODS

MOTOR FRT.
STORE DOOR
DELIVERY

MEMBERS
A.W.A. N.F.W.A.
AGT. A.V.L.

Represented by
Distribution Service, Inc.—New York—Chicago—San Francisco

UTICA, N. Y.

Broad Street Warehouse Corporation

Broad & Mohawk Sts., Utica, N. Y.
MODERN STORAGE WAREHOUSE
 100,000 Sq. Ft. of Floor Space. Private Siding. Low Insurance Rates.
 Sprinklered and Heated. Private Offices for Manufacturers' Representatives.
 Modern Facilities for
STORAGE - PACKING - DISTRIBUTION - FORWARDING
 Of Merchandise, Automobiles, Household Goods
 "IN THE HEART OF NEW YORK STATE"

UTICA, N. Y.

Jones-Clark Trucking & Storage Co.
of Utica, N. Y.

The Heart of New York State and natural distributing point. "Jones of Utica" has distributed Merchandise and Household Goods for 25 years. Every modern facility.

Member: N.Y.F.W.A., Allied Van Lines, Inc.

UTICA, N. Y.

Established 1916

Utica Warehouse Co., Inc.

Box 276

Utica, N. Y.

Unexcelled facilities for handling bulk shipments. Storage in transit on Cotton—Specializing in, Textiles, Alkalies, Denatured Alcohol. Warehouses on D. L. & W. and N. Y. C.—Private Sidings—Sprinklered throughout—Pool Car Distribution—Motor Service.

WHITE PLAINS, N. Y.

CARPENTER STORAGE, INC.

Also serving

Tarrytown
 Scarsdale
 Hartsdale
 Mamaroneck
 Port Chester
 Larchmont

107-121 Brookfield St.

One of the most modern and best equipped
 Storage Warehouses in Westchester.
 Household Goods Exclusively
 Low Insurance Rate
 Packing—Crating—Shipping
 Members N.Y.F.W.A.

WHITE PLAINS, N. Y.

J. H. EVANS & SONS, INC.

Office & Warehouse: 253-257 Hamilton Ave.

Household Goods Moving, Storage, Packing, Shipping

Prompt service for any point in Westchester County

Member N.Y.F.W.A.

YONKERS, N. Y.

McCann's Storage Warehouse Co.
3 MILL ST.**Fireproof Storage Warehouse**

Strictly modern in every respect. The largest and latest in Westchester County—serving entire county.

CHARLOTTE, N.C.

AMERICAN STORAGE & WAREHOUSE CO.
CHARLOTTE, N. C.

OFFICE AND WAREHOUSE 439-441 S. CEDAR ST.
 MERCHANDISE STORAGE ONLY. POOL CARS DISTRIBUTED.
 MOTOR TRUCK SERVICE LOCAL AND DISTANCE. PRIVATE
 RAILROAD SIDING.

ESTABLISHED 1908

CHARLOTTE, N. C.

Carolina Transfer & Storage Co.

1230 W. Morehead St., Charlotte, N. C.

Bonded fireproof storage.

Household goods and merchandise.

Pool cars handled promptly. Motor Service.

Members A. W. A. and N. F. W. A.

CHARLOTTE, N.C.

**MERCHANDISE STORAGE**

Pool Car Distributors
 Private Sidings

UNION STORAGE & WAREHOUSE CO., INC.
(BONDED)

1000-1008 West Morehead St.

Private Branch Exchange

30 Private Offices

Insurance Rate 25%

MEMBER OF A.W.A.—MAY.W.A.—ALLIED DIST., INC.

WILMINGTON, N. C.

33,000 Sq. Ft. Floor Space—Fireproof

Farrar Transfer & Storage Warehouse

1121 South Front Street

Household Goods, Storage, Packing, Shipping

POOL CAR DISTRIBUTION

MOTOR SERVICE

Use Private Siding—A. C. L. R. R.

FARGO, N. D.

Union Storage & Transfer Co., Fargo, N. D.
General Storage—Cold Storage—Household Goods

Established 1906

Four warehouse units, total of 160,500 sq. ft. floor space—two
 sprinkler equipped and two fireproof construction. Low insurance
 rates. Common storage, cold storage and household goods. Ship in
 our care for prompt and good service.

Office: No. 806-10 Northern Pacific Avenue

AWA—ACW—N.F.W.A.—N.F.W.A.

AKRON, OHIO

Cotter-City View Storage Co.

Main Office: 70 CHERRY ST., AKRON, OHIO

100,000 SQ. FEET STORAGE SPACE

Fireproof, concrete buildings, modern facilities, convenient
 location, ideally suited for clean, careful storage of

HOUSEHOLD GOODS AND MERCHANDISE

Distribution area: Akron, Barberton, Cuyahoga
 Falls. Special attention to pool cars. Low trans-
 fer rates.

LONG DISTANCE MOVING

Pool Cars and Spot Stock Accounts Solicited.
 Private Siding B. & O. R. R. Free switching all
 roads. Low insurance rate.

Members of N. F. W. A.—O. A. C. H.—O. W. A.



AKRON, OHIO

The KNICKERBOCKER

WAREHOUSE & STORAGE CO.

36 CHERRY STREET

Household Goods and Merchandise
 Fireproof Warehouse—Local and long
 distance moving.



CANTON, OHIO

CANTON STORAGE, Inc.

4TH AND CHERRY N.E.

MERCHANDISE—HOUSEHOLD GOODS
 COLD STORAGE

U. S. GENERAL BONDED WAREHOUSE
 U. S. CUSTOMS BONDED WAREHOUSE
 DISTRIBUTORS

Also Members: A.W.A.—O.F.W.A.—O.W.A.—A.C.W.



CINCINNATI, OHIO

THE BALTIMORE AND OHIO WAREHOUSE CO.

Operating large modern warehouses for the storage of general merchandise at
 Second and Smith Sts. and at Sixth and Baymiller Sts.

Special room for storage of semi-perishable goods: Nuts, Dried Fruits, Rice,
 etc., where a low temperature is maintained.

Special attention given to reshipping in L.C.L. lots the same day orders are
 received. Facilities for storage of Oils, Greases, Chemicals, and goods requiring
 cellar storage.

Low Insurance Rates. Sprinkler Systems.

Address:

Second and Smith Sts.

FRED W. BERRY,

Manager and Treasurer.

CONSIGN VIA BALTIMORE AND OHIO RAILROAD

CINCINNATI, OHIO

YOUR OWN BRANCH HOUSE
—WITHOUT THE OVERHEAD



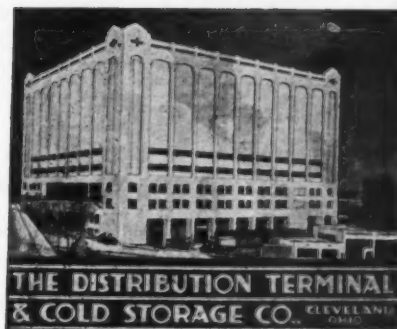
Modern — Efficient — Responsible

EVERY DISTRIBUTION AND
WAREHOUSING SERVICE
KNOWN TO THE TRADE

CINCINNATI TERMINAL WAREHOUSES, INC.

U. S. General Bonded Warehouse Number 1
Parkway 8070 Cincinnati, O.

CLEVELAND, OHIO



THE DISTRIBUTION TERMINAL
& COLD STORAGE CO. CLEVELAND, OHIO

Central Viaduct and West 14th St.

Local, regional and storage-in-transit
service, offering every facility known
to modern distribution.

New Trunk Line
Ultra-Modern Terminal
Plant Complete Service

Continent-wide Connections

CINCINNATI, OHIO

Consolidated Trucking, Inc.
Local and Long Distance Trucking
—Storage

N. W. Corner Pearl and Plum
Merchandise Storage Pool Cars
Penn. R.R. Siding Inter-City Truck Depot



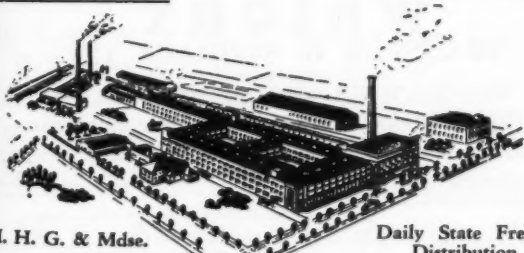
CLEVELAND, OHIO

THE GREELEY-GENERAL WAREHOUSE CO.

Main Office:
New York Central Orange Ave. Terminal, Broadway & E. 15th St.
175,000 Sq. Ft. of Available Floor Space; Truck Capacity 100 Cars; Operating
our own Motor Truck Equipment.

Represented by The American Chain of Warehouses
J. W. TERREPORTE W. H. EDDY
250 Park Ave. New York City 55 W. Jackson Blvd., Chicago, Ill.
Member of A.W.A.—Rotary International—Cleveland Chamber of Commerce

CLEVELAND, OHIO



H. H. G. & Mds.

Daily State Freight
Distribution

BRAMLEY STORAGE CO.

A Storage House of Distinction
Railroad Siding, Low Insurance Rates, Sprinkler System
C.F.W.A. and Steam Heated O.W.A.

CLEVELAND, OHIO

BRITTEN TERMINAL Inc.

General Merchandise Storage and
Distribution
Moving and Household Storage
Cartage

2775 PITTSBURGH AV.
Telephone FRospect 2970



CLEVELAND, OHIO

MEMBERS A.W.A. O.W.A.
LEDERER
SERVICE
TERMINAL
BUILDS BETTER BUSINESS

MERCANTILE WAREHOUSING AND DISTRIBUTING
West 25th St. Whse. Broadway White, Private Siding Nickel Plate Ry.
Private Siding Erie Ry. East 57th St. Whse.
In Northern Ohio Food Terminal Area

CLEVELAND, OHIO

DIRECT FROM FREIGHT CARS

SHIPMENTS to Cleveland, consigned to
The Lincoln Storage Company over any
railroad entering the city, can be handled
from freight car direct to our loading platform.

Carload shipments to our private siding,
11201 Cedar Ave., on the N. Y. C. Belt
Line, connecting with all R.R.s. entering
Cleveland; L. C. L.-Penns. Euclid Ave. Sta.
adjoining Euclid Ave. warehouse; other
R.R.s. to Cleveland, Ohio.



LINCOLN STORAGE

Geo. A. Rutherford, Pres. W. B. Thomas, Vice-Pres.

5700 Euclid Ave. CLEVELAND 11201 Cedar Ave.



CLEVELAND, OHIO

OUR SERVICE



Exclusive Agent:
Greater Cleveland
for Aero-Mayflower
Transit Co.

is a continuation of your own
when you forward your ship-
ments in our care.

May we serve you?

The NEAL STORAGE COMPANY

CLEVELAND OHIO

* Operating the Cleveland Bonded Warehouses, Inc.

CLEVELAND, OHIO

RAILWAY WAREHOUSES, INC.

BUILDERS OF BIGGER AND BETTER BUSINESS

3540 CROTON AVE. S. E.

CLEVELAND, OHIO

COLUMBUS, OHIO

W. Lee Cotter, Pres.

Wm. J. O'Neill, Mgr.

MERCHANDISE
STORAGE



Established 1882

POOL
CARS

This modern, clean, and well ventilated warehouse
provides thorough protection for your merchandise.
Bonded Storage Facilities. Private Siding New York
Central Railroad. Free switching from all railroads.

MEMBER OHIO WAREHOUSEMEN'S ASSOCIATION

THE COLUMBUS TERMINAL WAREHOUSE CO.
COLUMBUS, OHIO

COLUMBUS, OHIO

Member of Associated Warehousemen, Inc.

COLUMBUS WAREHOUSES, INC.

A COMPLETE MERCHANDISE DISTRIBUTION WAREHOUSE

MOST CENTRAL WAREHOUSE—3 BLOCKS OF
CENTER DOWNTOWN DISTRICT

POOL CAR DISTRIBUTION

PRIVATE SIDING AND SWITCH—N. Y. CENTRAL LINES

228 West Broad St., Columbus, Ohio

COLUMBUS, OHIO

Consign Your Household Goods Shipments to

DAN EDWARDS at COLUMBUS

Packing—Shipping—Storage—Local and Long Distance Moving—Steel
and Concrete Warehouse—Private Siding



EDWARDS TRANSFER AND STORAGE CO.
426 North High St., Columbus, Ohio

Member—National Furniture Warehousemen's Assn., Ohio Warehouse-
men's Assn.

The Men Who Distribute

Oxford Paper

Read DISTRIBUTION & WAREHOUSING
and consult the Directory of Warehouses

COLUMBUS, OHIO

CHAS. F. COHAGAN, PRES.
IDEALLY LOCATED

COLUMBUS: — In the
Center of Ohio.

THE MERCHANDISE
WAREHOUSE CO: —
In the Center of Co-
lumbus.

SERVICE: — That
means more business
for you at less ex-
pense.
Let us serve you at
Columbus.

PRIVATE SIDING ON
N. Y. CENT. RY.
U. S. Customs Bonded



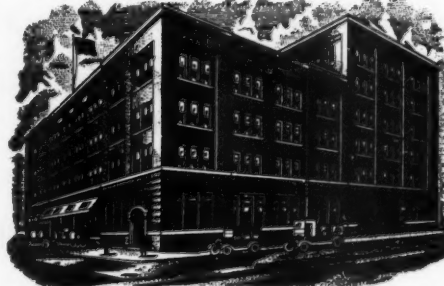
The Merchandise Warehouse Co.
370 W. Broad St. Columbus, Ohio

MEMBER: A.W.A.—O.W.A.—A.C.W.

COLUMBUS, OHIO

MERCHANDISE STORAGE
and DISTRIBUTION

F
I
R
E
P
R
O
O
F



L
O
W
I
N
S
U
R
A
N
C
E

THE NEILSTON WAREHOUSE CO.

MARION, OHIO

MERCHANTS TRANSFER COMPANY

160 McWilliams Court, Marion, Ohio

Heavy Haulage Our Specialty. General Distribution and Storage of
Merchandise. Motor Vans for Local and Long Distance Moving. Stor-
age for Household Goods and Machinery. Packing and Shipping.
Private Siding New York Central Lines

MEMBER MAY. W. A.

MARION, OHIO

WRIGHT TRANSFER & STORAGE CO.

EST. 1899

MERCHANDISE—HOUSEHOLD GOODS

Wright Service to Meet Your Requirements.

Member of N.F.W.A.—O.W.A.

MIDDLETOWN, OHIO

Pres. & Gen. Mgr. A. Jackson

THE JACKSON & SONS CO.

Main Office, 1901 Manchester Ave.

Phones 1207 and 1208

Furniture Warehousing—Local and Long Distance Moving and
Contract Hauling—Operating Daily from Cincinnati to Chicago,
Pittsburgh, Charleston, W. Va., and way points.

SPRINGFIELD, OHIO

MEMBER



WAGNER WAREHOUSE CORPORATION

Pennsylvania Railroad and Lowry Ave.

A warehouse service that embodies every modern facility for
the storage and distribution of Household Goods and Mer-
chandise—Motor Freight Service—Door to door delivery at
Dayton, Springfield and Columbus daily.

Member of A. W. A.

STEUBENVILLE, OHIO



Z. L. TRAVIS, Pres. and Gen. Mgr.

Z. L. Travis Co.

311 North 6th St.

Modern Fireproof Warehouse—29,000 Sq. Feet
Reinforced Concrete

Household Goods Packed,
Shipped and Stored

Distribute Household
Goods and Merchandise,
Pool Cars, Long
Distance Moving.

Consign C. L. Shipments
P. C. C. &
St. L.

Members:
N. F. W. A.—O. W. A.



OKLAHOMA CITY, OKLA.

Bonded Under State Law

Oklahoma Bonded Warehouse Company

Merchandise Warehousing

Pool Car Distribution

Free Switching
Private Trackage
P. O. Box 1222

50,000 Sq. Ft.
Floor Space.
Fireproof

OKLAHOMA CITY, OKLA.



Fireproof Warehouse for Merchandise and Household Goods
Automatic Sprinkler System
Office and Warehouse
2-4 East California Avenue

We Solicit Your Accounts for
Transfer and Storage
Members of American
National Warehousemen's
Associations

TOLEDO, OHIO

GREAT LAKES TERMINAL WAREHOUSE CO.

of Toledo

355 Morris Street

General Merchandise, Cold Storage and Distribution
U. S. Custom Bonded Warehouse, Storage in Bond
Store Door Delivery Complete Service
Private Siding New York Central and B. & O. R. R.
Member American Chain of Warehouses

TOLEDO, OHIO

TOLEDO TERMINAL WAREHOUSE, INC.

128-138 Vance St.

Merchandise Storage and Distribution

Excellent Service

Member A. W. A.

YOUNGSTOWN, OHIO



FISHER-GILDER

Cartage & Storage Co.

Fireproof Warehouse

Household Goods and Merchandise

Established 1878

OKLAHOMA CITY, OKLA.

Member A. W. A.—A. C. W.—S. W. A.

Commercial Warehouse Co.

50,000 sq. ft. for Exclusive Merchandise Storage
Pool Car Distributors

Free Switching

14c. Insurance rate

OKLA. CITY, OKLA.

Established 1889

O. K. Transfer & Storage Co.

General Warehousing and Distribution



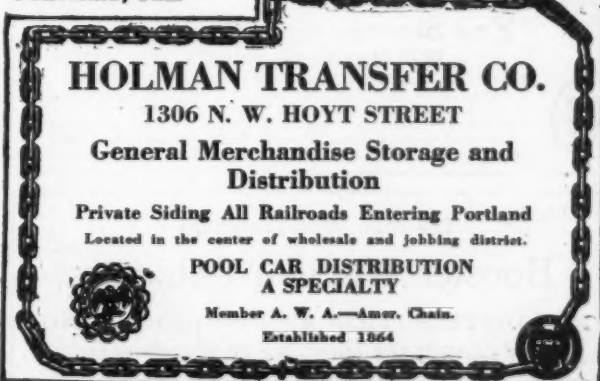
MOTOR
TRUCKS
& TEAMING

HOUSEHOLD
GOODS

MERCHANDISE

MEMBERS
NFWA, AWA,
Dist. Service, Inc.

PORTLAND, ORE.



HOLMAN TRANSFER CO.

1306 N. W. HOYT STREET

General Merchandise Storage and
Distribution

Private Siding All Railroads Entering Portland

Located in the center of wholesale and jobbing district.

POOL CAR DISTRIBUTION
A SPECIALTY

Member A. W. A.—Amer. Chain.

Established 1864

PORTLAND, ORE.

Colonial Warehouse and Transfer Co.

Operating Public and Custom Bonded Warehouses

Licensed under the U. S. Warehouse Act

Merchandise, Storage and Distribution

Private Siding Free Switching Sprinklered

1132 N. W. GLISAN STREET



PORTLAND, ORE.

OREGON TRANSFER COMPANY

Established 1848

1238 Northwest Glisan Street Portland, Oregon

U. S. BONDED and PUBLIC WAREHOUSES

Merchandise Storage and Distribution

Lowest Insurance Rates—Sprinkler Equipped

Member A. W. A.

Eastern Representatives Distribution Service, Inc.

PORTLAND, ORE.

DISTRIBUTION A SPECIALTY*Low Rates—Prompt Service—Commercial Accounts Only*

Let us be Your Pacific Coast Agents

Complete Warehouse and Drayage Facilities—19 Motor Trucks

Just consign your LCL or Carload Shipments to

RAPID TRANSFER & STORAGE CO., INC.

630 NORTHWEST 10TH AVE. PORTLAND, OREGON

and we will do the rest.

Member of OreWA—PD&WA

PORTLAND, ORE.

Radio Wilhelm, Pres.

RUDIE WILHELM WAREHOUSE CO.

70,000 Sq. Ft. Fireproof Concrete Storage Space

ADT Automatic Sprinkled System

Household Goods and Merchandise Distribution

Portland Commercial Agents: Judson Fr't Fw'd'g Co.

ALTOONA, PA.

Route your RAIL & TRUCK shipments
care of**ALTOONA STORAGE & TRANSFER CO.**

2701 Industrial Ave., Altoona, Pa.

P.R.R. track connections

STORAGE—CHECKING POOL CARS—DISTRIBUTIONDoor to Door deliveries from storage stock
to Central Penna. pointsALLENTOWN, PA.
BETHLEHEM, PA.500,000 CU. FT. COLD
STORAGE
200,000
SQ. FT. DRY
& HOUSEHOLD
STORAGEServing
ALLENTOWN
BETHLEHEM
AND EASTON
Private Siding
LEHIGH & NEW
ENGLAND R. R.**LEHIGH AND NEW ENGLAND TERMINAL WAREHOUSE COMPANY**

15th Avenue, North of Broad St., Bethlehem, Pa.

Represented by American Chain of Warehouses

ERIE, PA.

Erie Storage & Carting Co.

1502 Sassafras St., Erie, Pa.

MOVING—PACKING—SHIPPING—STORAGEWarehouse in the center of the city, with trackage from
N. Y. Central Lines and switching to all other lines. Un-
excelled facilities for handling shipments of household
goods and merchandise. Branch house service for manu-
facturers. Members of N.F.W.A.—P.F.W.A.—Rotary and Kiwanis Clubs

The Men Who Distribute

Hoosier Kitchen CabinetsRead **DISTRIBUTION AND WAREHOUSING**
and consult the Directory of Warehouses

HARRISBURG, PA.

Pool CarsEfficiently
Handled

Merchandise and Household Goods Storage

HARRISBURG STORAGE CO.

P. R. R. Sidings

HARRISBURG, PA.

American Warehousemen's Association, National Furniture Warehousemen's
Association, Penna. Furniture Warehousemen's Association

HAZLETON, PA.

CHRIST N. KARN, Prop.

KARN'S TRANSFER & STORAGE**FIREPROOF STORAGE WAREHOUSE**

Household Goods Storage, Packing, Shipping

Merchandise Storage and Distribution

Pool Cars Distributed. Local and Long Distance Hauling

Members of N. F. W. A.



LANCASTER, PA.

Keystone Express & Storage Co.**STORAGE—DISTRIBUTORS—FORWARDERS**

Merchandise and Household Goods

MANUFACTURERS' DISTRIBUTORS MOTOR SERVICE

Siding on P. R. R. and P. & R.

NEW CASTLE, PA.

Keystone-Lawrence Transfer & Storage Co.**Packing, Crating, Storage and Shipping
of Household Goods**Merchandise distribution. Pool car shipments. Motor trucks
for light and heavy hauling and long distance moving.

Members N. F. W. A.

Members Penna. Whse. Assoc.

OIL CITY, PA.

CARNAHAN**Transfer and Storage**The most reliable transfer in Venango County. Fireproof ware-
house. Private rooms for furniture and pianos. General hauling.
Overland hauling. Piano moving. Furniture packing a specialty.

Forwarding agents

Members N. F. W. A.

PHILADELPHIA, PA.

ATLAS**STORAGE WAREHOUSE COMPANY****FIREPROOF DEPOSITORY**

4015 Walnut Street

Member N. F. W. A., P. F. W. A. and C. S. & T. A.

WALTER E. SWEETING, President

PHILADELPHIA, PA.

Est. over 40 years.

FENTON STORAGE CO.**Absolutely Fireproof**

46th and Girard Ave.

Cable Address "Fenac"

P. R. R. Siding

Storage, moving and distribution of household goods and merchandise.

PHILADELPHIA, PA.

68 Acres OF FLOOR SPACE



Motor Truck SERVICE

We own and operate a fleet of motor trucks to provide "Store door" delivery throughout the Philadelphia trading area and are especially equipped to render "next morning" delivery anywhere within the area shown in the above map.



13 Warehouses located in the foremost wholesale and retail districts, served by both Reading R. R. and Pennsylvania R. R. Trackage facilities for 143 cars. Streets leading to and from loading platforms are wide and well paved, thus eliminating vehicular congestion. Modern fireproof construction provides low insurance rates. High-speed elevators to all floors. Completely equipped pool car departments. No cartage expense on L. C. L. shipments by rail. A personnel especially trained to handle all merchandise.

TERMINAL WAREHOUSE COMPANY

Delaware Ave. and Fairmount

Members—A. W. A., N. F. W. A., Pa. F. W. A.

Represented by DISTRIBUTION SERVICE, INC.

100 Broad Street, NEW YORK CITY . . . Bowling Green 9-0986

624 Third Street, SAN FRANCISCO . . . Phone Sutter 3461

219 East North Water Street, CHICAGO . . . Phone Sup. 7180

An Association of Good Warehouses Located at
Strategic Distribution Centers



PHILADELPHIA, PA.

Fidelity—20th Century Storage Warehouses

General Offices—1811 Market St.

H. NORRIS HARRISON, Pres. F. L. HARNER, Vice-Pres., Treas.
LEAH ABBOTT, Secy.

Bus type vans for speedy delivery anywhere. We distribute pool cars of household goods. Prompt remittance.

Assoc. A. W. A., N. F. W. A., Can. S. & T., P. F. W. A.

PHILADELPHIA, PA.

GALLAGHER'S WAREHOUSES

Executive Offices—50 So. 3rd St.

General Merchandise Storage and Distribution

U. S. Bonded and Free Stores

Carload Distribution

Direct Railroad Sidings: Penna. R. R.—Reading R. R.
Company owns fleet of motor trucks for city and suburban deliveries

PHILADELPHIA, PA.

BUELL G. MILLER, President



MILLER

North Broad Storage Co.

BROAD & LEHIGH & BRANCHES

Member N.W.A., P.F.W.A., P.M.T.A., C.F.M.A. of Pa.

PITTSBURGH, PA.

1,750,000 Cubic Feet of Storage Space

Warehouse with Penna. R. R. siding for Merchandise
Large fleet of Local and Long Distance Vans. Expert packers and handlers. Let us serve you!

Haugh and Keenan Storage & Transfer Co.

Offices and Warehouses, Centre and Euclid Aves., Pittsburgh, Penna.

Member A. W. A.—N. F. W. A.

PITTSBURGH, PA.

"33 Years of Service"

Merchandise

Warehouses

Sprinkler Protected

Distributors

Penna. R. R. Siding

Kirby Transfer & Storage Co.

2538 Smallman St.

Pittsburgh, Pa.

PITTSBURGH, PA.

THOMAS WHITE, Owner and Manager

IN THE HEART OF PITTSBURGH JOBBING DISTRICT
WHITE TERMINAL CO.

17th & Pike Streets

Food Products
Merchandise

WAREHOUSING

Also operating

WHITE MOTOR EXPRESS CO.

EST. 1918

TRUCKING SERVICE

PENNA. R.R. SIDING

L. C. L. TO P. R. R.—11TH ST.

PITTSBURGH, PA.

Pool Cars
Distributed

PITTSBURGH, PA.

DUQUESNE WAREHOUSE CO.

Office: Duquesne Way and Barbeau St.

Merchandise Storage & Distribution

Members A. W. A.

SCRANTON, PA.

R. F. POST

DRAYMAN & STORAGE WAREHOUSE

221 Vine St.

HOUSEHOLD STORAGE

MERCHANDISE STORAGE

LOCAL AND LONG DISTANCE MOVING

PRIVATE SIDING, D. L. & W. R. R.

POOL CARS

PACKING

SCRANTON, PA.

THE QUACKENBUSH WAREHOUSE COMPANY

219 Vine Street
MERCHANDISE AND HOUSEHOLD GOODS STORAGE
POOL CAR DISTRIBUTION
D L & W and D & H Sidings
Member of Allied Distribution, Inc.

UNIONTOWN, PA.

H. D. RYAN—L. G. HOWARD, *Proprietors***KEYSTONE TRANSFER CO.**

31 EAST SOUTH ST.
HOUSEHOLD GOODS PACKED, SHIPPED, STORED
LONG DISTANCE MOVING
Private Siding Pennsylvania R.R.

WILKES-BARRE, PA.

WILKES-BARRE WAREHOUSING CO.

General Storage and Distribution
Prompt and Efficient Service
Milling-in-Transit and Pool Cars

19 New Bennett St.

Wilkes-Barre, Pa.

WILLIAMSPORT, PA.

WILLIAMSPORT STORAGE CO.

FIREPROOF BUILDING—416 FRANKLIN STREET
P. R. R. SIDING
MERCHANDISE STORAGE AND DISTRIBUTION
HOUSEHOLD GOODS—DRAYAGE
IDEAL DISTRIBUTING POINT FOR CENTRAL PENNSYLVANIA

PROVIDENCE, R. I.

Terminal Warehouse Company of R. I., Inc.

Storage all kinds of General Merchandise, Pool Car
Distribution. Lowest Insurance.

Trackage facilities 50 cars. Dockage facilities on
deep water.

Shipping directions South Providence, R. I.

CHARLESTON, S. C.

Charleston Warehouse and Forwarding Co.

Merchandise Storage and
Distribution of Pool Cars

Modern Concrete Warehouse. 100,000 Square Feet of Storage Space.
Private Tracks Connecting with All Railroad and Steamship Lines.
Motor Truck Service.

Members of the American Chain of Warehouses, Inc.

CHATTANOOGA, TENN.

General Merchandise Storage & Distribution

Pool Car Distribution—City Delivery Service—Forwarding
Agents—Direct Switching Connections into Warehouse—
Private Siding
Fully Sprinklered Low Insurance

TEXTILE STORAGE & WAREHOUSE CO.

Efficient

1807 Elmendorf Street

Courteous

KNOXVILLE, TENN.

J. E. Dupes, Pres. & Gen. Mgr.—C. H. Pauli, Treas.

Rowe Transfer & Storage Co.

416-426 N. Broadway

Household Goods and Merchandise Storage and
Distribution. Pool Car Distribution.
Fireproof Warehouse. Low Insurance.

Agent, Aero Mayflower Transit Company
Member, Mayflower Warehousemen's Association & S. W. A.



KNOXVILLE, TENN.

FIREPROOF STORAGE & VAN COMPANY, Inc.

Successors to Knoxville Fireproof Storage Co.
201-211 Randolph St.
Knoxville, Tennessee

135,000 square feet on Southern Railway tracks.
Equipped with Automatic Sprinkler

Insurance at 12c. per \$100.00 Household goods shipments
per annum solicited. Prompt remittances
Pool Cars distributed. made.

MEMBERS

American Warehousemen's Ass'n

PROMPT AND EFFICIENT SERVICE

MEMPHIS, TENN.

S. S. DENT, Pres.

General Warehouse & Distributing Co.

435 So. Front St.

"Good housekeeping, accurate records, Personal Service"
Located in the center of the Jobbing & Wholesale district.
Sprinklered Low Insurance
Private R. R. siding Perfect service
Member of M.W.A.

MEMPHIS, TENN.

Pres. J. H. POSTON

Secy. and Treas. W. H. DEARING

**JOHN H. POSTON
STORAGE WAREHOUSES
INCORPORATED**

671 to 679 South Main St., on Illinois Central Railroad
Tracks

Established 1894

Free Delivery from All Railroads on Car Lots
and from Cotton Belt R. R. Stations
Insurance Rate \$1.41 per \$1,000 per Annum
No Charge for Switching To All Railroads on Car
Lots for Competitive Points and Illinois Central Rail-
road Local Stations.

DISTRIBUTION A SPECIALTY
MEMPHIS, TENN.

MEMPHIS, TENN.

"SERVICE"

ROSE WAREHOUSE CO.

2-8 East and 2-12 West Calhoun Avenue
Memphis, Tennessee

Merchandise Storage and Pool Car Distribution

"SERVICE"



NASHVILLE, TENN.



MERCHANDISE STORAGE, DISTRIBUTION AND DRAYAGE
HOUSEHOLD STORAGE, LOCAL AND LONG DISTANCE MOVING
FIREPROOF WAREHOUSES—UP-TO-DATE EQUIPMENT

BOND-CHADWELL Co.

100 to 124 FIRST AVENUE, N.

1623-1625 BROADWAY

NASHVILLE, TENN.

521 Eighth Ave., So.

Central Van & Storage Co.

MERCANTILE AND HOUSEHOLD STORAGE
WAREHOUSE STOCK and POOL CAR DISTRIBUTION
Fire Proof Warehouse Space—Centrally Located

NASHVILLE, TENN.

ESTABLISHED 1886

The PRICE-BASS CO.

194-204 Hermitage Ave.

Merchandise Storage



Automatic Sprinklered — Lowest
Insurance Spot Stock and Pool
Car Distribution — Private
Siding — Free Switching
Motor Truck Service.

AMARILLO, TEXAS

WM. C. BOYCE

J. A. RUSH

Armstrong Transfer & Storage Co., Inc.

Distributors of Merchandise

BONDED WAREHOUSES

AMARILLO AND LUBBOCK, TEXAS

Member S. W. A.—Amarillo Warehousemen's Association
—American Chain of Warehouses



AMARILLO, TEXAS

BISHOP

WAREHOUSE & STORAGE CO.

Between 5th & 6th on So. Grant St.

Operating two self-owned warehouses. Largest most modern in city.
Goods of any size or quantity handled. Capacity 368 cars. WARE-
HOUSING — STORAGE — TRANSFER — FORWARDING — DISTRI-
BUTION — POOL CARS.

AUSTIN, TEXAS

SCOBIEY

FIREPROOF

WAREHOUSE

AUSTIN, TEXAS

GENERAL WAREHOUSING DISTRIBUTION

CORPUS CHRISTI, TEX.

C. M. Crocker—Pres. J. W. Crocker—Vice Pres.
May Crocker—Sec. & Treas.

**CROCKER
TRANSFER AND STORAGE CO., Inc.**

Established 1912

Distribution Pool Cars or Boat Shipments
Merchandise & Household Goods

Storage—Drayage—Crating

Members — A.W.A. N.F.W.A. S.W.T.A.

DALLAS, TEXAS

REFERENCE ANY DALLAS BANK

**AMERICAN
TRANSFER & STORAGE CO.**

BONDED FIREPROOF WAREHOUSES
MERCHANDISE—HOUSEHOLD GOODS

POOL CARS DISTRIBUTION
K. K. MEISENBACH

LOCAL DRAYAGE
JACK ORR

DALLAS, TEXAS.

E. D. Balcom

Cus K. Weatherred

**DALLAS TRANSFER AND
TERMINAL WAREHOUSE CO.**

Second Unit Santa Fe Building
Dallas, Texas

Modern Fireproof
Construction—
Office, Display,
Manufacturers, and
Warehouse Space



Operators of Lone Star Package Car Company
(Dallas Division). Daily service via rail from St. Louis
and C.F.A. territory to all Texas points.
Semi-weekly service via Morgan Steamship Line from New York and Seaboard
territory to all Texas points.

MEMBERS { A. W. A., N. F. W. A., American Chain of Warehouses
Southwest Warehouse & Transfermen's Assn., Rotary Club.

DALLAS, TEXAS.

Dallas-Trinity Warehouse Company

"Courtesy With Unexcelled Service"

Complete Warehousing

R. E. Abernathy, Pres.

3205 Worth, Box 26, Dallas

Fl. Worth-Trinity Warehouse Co. Also Corsicana-Trinity Warehouse Co.
Fl. Worth, Texas Corsicana, Texas
Member of N.F.W.A.—A.W.A.—S.W.A.

DALLAS, TEXAS

IN DALLAS IT'S

**The Interstate Fireproof
Storage & Transfer Co.**

For Fireproof Storage and
Distribution Service

Fireproof—16c Insurance Rate
Merchandise
Storage and
Distribution

Our new one-half million dollar
plant.
Household Goods Stored, Moved,
Packed and Shipped.
DALLAS—The Logical Distribution
City for the Great Southwest.

The Interstate Fireproof Storage & Transfer Co.

W. I. Ford

301-07 North Market Street
Associate Managers

R. E. Eagon

FORT WORTH, TEXAS

In Fort Worth It's Binyon-O'Keefe

With three warehouses having a total of 250,000 square feet of floor space;
with our private side and free switching to Fort Worth's eleven Trunk Line
Railroads—in Fort Worth, Binyon-O'Keefe is best prepared to serve you.



BINYON-O'KEEFE
Fireproof Storage Co.
Fort Worth

Associated with Distribution Service, Inc.



FORT WORTH, TEXAS

GENERAL CARTAGE CO.

1212 E. Lancaster Ave., Fort Worth, Texas

FIREPROOF STORAGE
MERCHANDISE & HOUSEHOLD GOODS
POOL CAR DISTRIBUTION

TEMPLE HARRIS, Gen. Mgr.

FORT WORTH, TEXAS

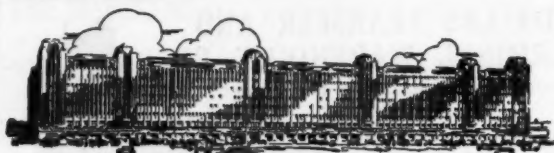
Storage, Cartage, Pool Car Distribution

O. K. Warehouse Company, Inc.

255 W. 15th St.

Fort Worth, Tex.

FORT WORTH, TEXAS



The Southwest's Finest Warehouse
MERCHANDISE STORAGE
 POOL CAR DISTRIBUTION, OFFICE DISPLAY
 AND WAREHOUSE SPACE
Texas and Pacific
Terminal Warehouse Co.

HARLINGEN, TEXAS

Jones Transfer & Storage Co., Inc.

Warehouses located at Harlingen, Brownsville, McAllen, Edinburg.
 Merchandise storage—pool car distribution, daily motor freight lines.
 Furniture vans—equipment for heavy hauling.

Service Covers the Lower Rio Grande Valley

HOUSTON, TEXAS

Subscriber to Merchandise Warehousing
 Trade Code, Certificate No. 34-338

PATRICK TRANSFER & STORAGE CO.

Shipside and Uptown Warehouses
 Merchandise Storage and Distribution
 Operators—Houston Division
LONE STAR PACKAGE CAR CO.

1302 Nance St.

Houston, Texas

HOUSTON, TEXAS

**UNIVERSAL TERMINAL
 WAREHOUSE COMPANY**

Fireproof Storage—Sprinklered Warehouses

New York Office: 100 Broad Street
 Chicago Office: 427 West 27th Street

HOUSTON, TEXAS

IN HOUSTON

**Westheimer
 Transfer and Storage Co., Inc.**

Fifty Years of Dependable Service
 SERVICE TO COVER EVERY BRANCH OF THE INDUSTRY

Benj. S. Horvitz
 President

Members N. F. W. A.
 State and Local Assn.

SAN ANTONIO, TEXAS

Central Warehouse and Storage Co.

Merchandise Warehouse Hollow Tile Building,
 Concrete Floors. Consign shipments via South-
 ern Pacific. Distribution of pool cars. Transfers
 Household Goods.

Member of S. W. A.

SAN ANTONIO, TEXAS

**MERCHANTS TRANSFER & STORAGE CO.
 FIREPROOF BONDED WAREHOUSE**

Complete Storage and Distribution Service

50 years of satisfactory service

Member of American Chain of Warehouses

SAN ANTONIO, TEXAS

Muegge-Jenull Warehouse Co.

BONDED

FIREPROOF

POOL CAR DISTRIBUTORS
 STORAGE AND DRAYAGE

Dependable Service Since 1913

SAN ANTONIO, TEXAS

Scobey Fireproof Storage Co.

HOUSEHOLD - - - MERCHANDISE
 COLD STORAGE - - - CARTAGE
DISTRIBUTION

INSURANCE RATE - - - 10c

Members of 4 Leading Associations

SAN ANTONIO, TEXAS

MEMBER



SOUTHERN TRANSFER CO.

FIREPROOF BONDED STORAGE

Lowest insurance rate in San Antonio

Receivers and Forwarders of Merchandise

TYLER, TEXAS

EAST TEXAS TERMINAL WAREHOUSE CO., Inc.

*Serving the World's Largest Oil Field
 and All of North and East Texas.*

The highest type of BONDED Storage
 and Warehouse facilities.

POOL CAR DISTRIBUTION

Member—T.S.W.T.A.

415-17 N. College and Cottonbelt tracks.

TYLER, TEXAS

Tyler Warehouse and Storage Company

Bonded under the Laws of Texas

General Storage and Distribution from the Center of East
 Texas. Specializing in Pool Cars Merchandise.

WICHITA FALLS, TEXAS

Wichita Falls Fireproof Warehouse

(Reinforced concrete)

Motor Freight Service to All Territory

Tarry Warehouse & Storage Company, Inc.

Members { National Furn. Warehousemen's Assn.
 Southwest Warehouse & Transfermen's Assn.
 See TYLER-TARRY-FAGG Co. Associated

OGDEN, UTAH



**Western Gateway Storage
 Company**

COLD AND DRY STORAGE

A Modern Commercial Warehouse
 Bonded Service

Member American Warehousemen's Assn.

SALT LAKE CITY, UTAH

CENTRAL WAREHOUSE

Fireproof

Sprinklered

Insurance rate 18c. Merchandise Storage. Pool Car Distribu-
 tion. Office Facilities.

Member A. W. A.

SALT LAKE CITY, UTAH

Merchandise Storage and Distribution

Over 1,000,000 cubic feet reinforced Concrete
Sprinklered Space

Insurance Rate 18 Cents

JENNINGS-CORNWALL WAREHOUSE CO.

Salt Lake City, Utah

Represented by
DISTRIBUTION SERVICE, INC.

100 Broad St. NEW YORK CITY Phone Bowling Green 9-9936
219 East North Water St. CHICAGO Phone Sup. 7180
625 Third St. SAN FRANCISCO Phone Sutter 3401

An Association of Good Warehouses
Located at Strategic Distribution Centers

SALT LAKE CITY, UTAH

"This is the Place"

FOR BETTER SERVICE

SECURITY STORAGE & COMMISSION CO.

Over 25 Years Experience

Merchandise Warehousing - Distribution
Sprinklered Building - Complete Facilities
Lowest Insurance Cost - A.D.T. Watchman Service
Office Accommodations - Display Space

New York Chicago Salt Lake
260 W. Broadway 53 W. Jackson Blvd. 230 S. 4th West

MEMBER:
A.W.A.—U.W.A.—A.C.W.

NORFOLK, VA.

HOUSEHOLD AUTOMOBILE STORAGE

THE BELL STORAGE COMPANY, INC.
NORFOLK, VIRGINIA

MODERN SPRINKLER EQUIPPED WAREHOUSE
50,000 SQUARE FEET PRIVATE RAIL SIDING
Lowest Insurance Rate in Norfolk. Pool Car Distribution.
WE SPECIALIZE IN MERCHANDISE STORAGE
AND DISTRIBUTION

AGENTS: AERO MAYFLOWER TRANSIT COMPANY
Member N.W.A. & S.W.A.

RICHMOND, VA.

57 YEARS OF UNINTERRUPTED AND EXPERT SERVICE

BROOKS TRANSFER and STORAGE CO., Inc.
1224 W. Broad Street, Richmond, Va.

Two Fireproof Storage Warehouses—115,000 Square Feet Floor Space—Automatic
Sprinkler System—Lowest Insurance Rates in Richmond—Careful Attention to Storage
—Packing and Shipping of Household Goods—Private Railroad Siding—Pool Car
Distribution—Motor Van Service to All States East of Mississippi River.
Member of S. W. A.—N. F. W. A.

RICHMOND, VA.

100,000 Sq. Ft. Space

VIRGINIA BONDED WAREHOUSE CORPORATION
ESTABLISHED 1908 1709 E. CARY ST.

U. S. BONDED & PUBLIC WAREHOUSES
MERCHANDISE STORAGE & DISTRIBUTION
INSURANCE RATES 20c PER \$100 PER YEAR

Member A.W.A.—N.F.A.
BUILDINGS SPRINKLERED

ROANOKE, VA.

ROANOKE PUBLIC WAREHOUSE

Capacity 500 Cars

Automatic Sprinkler

Private Railroad Siding

Accurate Accounting

We make a Specialty of Storage and Pool Car Distribution
for Agents, Brokers and General Merchandise Houses.
Member of American Chain of Warehouses

SEATTLE, WASH.

THOS. WATERS, Pres.

F. J. MARTIN, Mgr.

A. B. C. STORAGE CO.
WAREHOUSING AND DRAYING

We make a specialty of Storage
for Agents, Brokers and General
Merchandise Houses.
Free Switching Service.

304 RAILROAD AVE., SO.

SEATTLE, WASH.

SEATTLE, WASH.

EYRES TRANSFER AND WAREHOUSE CO., Inc.
SEATTLE, WASH.

Fireproof Warehouses 220,000 Square Feet

INSURANCE .133 Cents per \$100.00

GENERAL STORAGE AND DISTRIBUTING SERVICE
OPERATING 65 AUTOS Since 1889

Members of NFWA—ACW—WSPA

SEATTLE, WASH.

LET LYON GUARD YOUR GOODS



**Northwest
Distributors**

Seattle—Tacoma—Portland
Seattle, 2030 Dexter Avenue
Dean C. McLean, Mgr.

SEATTLE, WASH.

**TAYLOR-EDWARDS
Warehouse & Transfer Co., Inc.**

Free switching service—Low insurance rates
Associated with leading warehouses through

DISTRIBUTION SERVICE, INC.

New York

Chicago

San Francisco

Members of—American Warehousemen's Assn.; National Furniture Warehousemen's
Assn.; Washington State Warehousemen's Assn.

SEATTLE, WASH.

UNITED WAREHOUSE COMPANY
1990 Railroad Avenue

GENERAL MERCHANDISE
STORAGE

100,000 sq. ft. capacity
Established 1900



POOL-CAR
DISTRIBUTORS

U. S. Customs Bond
Free Switching

SEATTLE, WASH.

WINN & RUSSELL, INC.

1014 Fourth Ave., South

General merchandise storage and distribution

Located in the center of wholesale and jobbing district

Low insurance rates Office and desk space

Member—A. W. A.—Allied Distribution, Inc.

SPOKANE, WASH.

Millard Johnson
Pres.

W. B. Fehlin
Secy.

Consign to

SPOKANE TRANSFER & STORAGE CO.

A. W. A.

308-316 Pacific Ave.

N. F. W. A.

Merchandise Department

Largest Spot-Stocks in the
"Inland Empire."
(67,000 sq. ft.)

Household Goods Dept.

Assembling and distribution of
pool and local shipments.
Agents for JUDSON.

For City of Washington, D. C.

refer to

DISTRICT of COLUMBIA

HUNTINGTON, W. VA.

**THE SHIPPING CENTER for
4 STATES**
Ohio Kentucky Virginia West Virginia

Huntington is the shipping center of four states. From it you can reach Southern West Virginia, Southern Ohio, Eastern Kentucky and Northern Virginia by five railroads, the Ohio River and paved highways leading in five directions.

A first class warehouse for your goods; private side track from any railroad entering city—no switching charge; our own trucks and a competent force of employees. All at a cost that is surprisingly low yet everything is convenient for your warehousing needs.

MAIER SALES & STORAGE CO.
1639-41-43-45 Seventh Ave., Huntington, W. Va.
Member of A.C.W.—A.W.A.

EAU CLAIRE, WIS.

LICENSED

BONDED

SIOUX STORAGE & FORWARDING CO.
113-19 South Dewey St.

Complete Warehousing and Distribution Service
Private Railroad Siding
Motor Truck Service Motor Freight Terminal
Modern concrete building with all modern facilities

LA CROSSE, WIS.

The Gateway City Transfer & Storage Co.
C. B. & Q. R.R. Siding


The logical distribution center for Western Wisconsin,
Eastern Minnesota, and Northeastern Iowa.
Trackage warehouse for merchandise and Free switching service.
We specialize in pool car distribution.

LA CROSSE, WIS.

La Crosse Terminal Warehouse Co.
GENERAL STORAGE

We make a specialty of storage and pool car distribution for agents,
brokers, and general merchandise houses.
Free switching service
Large fleet of Vans and Delivery Trucks
We give prompt service
430-434 SOUTH THIRD STREET

MADISON, WIS.

MEMBER  MRS. ROBERT M. JENKINS, Vice-Pres.

The Union Transfer & Storage Co.

State Bonded Warehouse on Private Switch
Fireproof Building 85,000 Square Feet
Pool Car Distribution by Truck or Rail
Private Siding Milwaukee Road,
Free Switching All Roads
Established 1895

Attention Shippers

When you use Distribution and Warehousing for the name of a warehouse in any city, please mention the fact you got the information from this publication. By doing this, you will please the warehouseman and the publishers.

MILWAUKEE, WIS.

**SPOT STOCKS PLUS SERVICE
WILL HELP SALES—NOW!**

UNITED STATES CUSTOMS BONDED—WISCONSIN LICENSED AND BONDED

Atlas warehouses, nine in all with over 500,000 square feet of floor space, sprinkler equipped and A.D.T. alarm and watchmen supervised, are ready to speed up your distribution service, safely, economically and efficiently. Ship to us by rail, truck or steamer. Fifty car track capacity, two docks with water deep enough for any freighter on the Great Lakes—ocean vessels from European ports come direct to us with merchandise for storage.

Atlas at Milwaukee with its trained personnel is in a position to help you with your distribution problems—Write to us today!

ATLAS
STORAGE COMPANY
710 West Virginia St. Milwaukee, Wisconsin

Represented by:

DISTRIBUTION SERVICE, INC.
100 Broad St. 219 East North Water St. 625 Third St.
New York, N. Y. Chicago, Ill. San Francisco, Cal.

Fast distribution to six states from MILWAUKEE

MILWAUKEE, WIS.

HANSEN
STORAGE CO.

"The Million Dollar
Warehouse Company"

ESTABLISHED 27 YEARS—LARGEST IN WISCONSIN
18 Warehouses—50 Car Side Track—850 Foot Dock
DEPENDABLE—EXPERT—QUICK SERVICE

We Specialize in
Merchandise Distribution and Furnish
"BRANCH HOUSE SERVICE"
"Let Us Solve Your Distribution Problems"
Ship Your Merchandise to Yourself in Our Care
and Have Instructions Follow.
"We Will Do the Rest."
We Own and Operate Large Delivery Equipment
"U. S. Government Bonded Warehouse"

MILWAUKEE, WIS.

LINCOLN

FIREPROOF WAREHOUSE CO.

WAREHOUSE SERVICE + RAILROAD SIDINGS
OF EVERY DESCRIPTION + DOCKING FACILITIES
LOCATED IN HEART OF BUSINESS DISTRICT
OFFICES: 206 W. HIGHLAND AVE.
Member of A.W.A.—W.W.A.—N.F.W.A.

MILWAUKEE, WIS.

NATIONAL WAREHOUSE CORP.
468 EAST BRUCE ST.

Patronage National Distributors Solicited
Office Facilities Pool Car Distribution
Siding for 14 Cars No Demurrage Problems
Our Unique Merchandise Warehousing and Distributing
plan will save you money.
Write for it.

CANADIAN WAREHOUSE SECTION

VANCOUVER, B. C.

ELMER JOHNSTON, Pres.

IN VANCOUVER IT'S THE
JOHNSTON

National Storage, Ltd.

STORAGE — CARTAGE
FORWARDING — DISTRIBUTING
You Can Buy No Better Service

TORONTO, ONTARIO

CANADIAN RAIL AND HARBOUR
TERMINALS, Limited

Foot of York St., TORONTO, Canada

CANADA'S FINEST WAREHOUSE
Cold Storage Dry

1,000,000 square feet of floor space, 2,200 feet of docks and transit sheds and 6,000 feet of railroad sidings. General storage; Bonded and Free Storage; Cold Storage; Office and Display Space; Lowest Insurance. Transportation to every part of the Province and Dominion.

Free Switching. Pool Cars to All Major Distributing Points

TORONTO, ONTARIO

**Tippet-Richardson
Limited**

218 FRONT STREET EAST TORONTO, ONT.
C. F. B. Tippet, President C. A. Richardson, Vice-President

MONTREAL, QUEBEC

Morgan Trust Company

Furniture Two
Storage Warehouses

For 90 years
connected with Montreal business.

All consignments
to us will receive most careful
attention.

1455 UNION AVENUE



MONTREAL, QUEBEC

Established 1903
W. G. KENWOOD, Pres. & Man. Dir.

Westmount Transfer & Storage Ltd.

205 Olivier Ave., Westmount, P. Q.
LOCAL AND LONG DISTANCE MOVERS

Private Room System for Storage
CRATING, PACKING and SHIPPING
Charges Collected and Promptly Remitted
Member: N. F. W. A., C. S. & T. A.



MEXICO

MEXICO, D. F. (MEXICO CITY)

BODEGAS CHOPO, S.A. (MDSE & HHG) Apartado (P.O.B.) 1146

Pres. & Gen. Mgr., H. ROSENSTEIN

Modern, Fireproof Whses.

Connected with all Mexican RR's

Storing of General mds. Forwarding, Packing furniture
Consular Invoices. Assoc. NFWA
Correspondent Security Storage Co., Washington, D. C.

P. M. Boggs, vice-president, Canada Dry Ginger Ale, Inc., said: "If you want to sell the year round, you must advertise the year round. It takes more courage, in my opinion, to pursue this policy than it does to make the decision that your business is going to be a year round seller."

The Men Who Distribute

Jaques Baking Powder

Read DISTRIBUTION AND WAREHOUSING
and consult the Directory of Warehouses



CHICAGO'S MOST IDEAL LOCATION FOR EXHIBITS, MEETINGS, CONVENTIONS

Hotel Sherman has a tremendous appeal to the business man visiting Chicago because of its interest, its versatility, its splendid central location, its fine food and its moderate rates.

Conventions and meetings of any size—whether large or small—find unusual features at Hotel Sherman. Available in the Exhibition Hall on the Mezzanine Floor are 39,000 square feet of exhibit space. Full details on request.

1700 ROOMS FROM \$2.50

HOTEL SHERMAN

PUBLISHER'S STATEMENT OF CIRCULATION

This is to certify that the average circulation per issue of

DISTRIBUTION AND WAREHOUSING

for the six months' period July 1st to and including December 31st, 1934, was as follows:

Copies sold.....2000
Copies distributed free..... 334
Total2334

Signed A. K. MURRAY, Pres.

Subscribed to and sworn before me on this 1st day of February, 1935.
WM. A. MAAS

Notary Public Queens Co. No. 3210, Reg. No. 3450
Cert. filed in N. Y. Co. No. 1040 Reg. No. 6-M-662
Commission expires March 30, 1936.

**Pluck and Business
Enterprise
All in One Word
"Advertise"**

INDEX TO GENERAL ADVERTISERS

Note: For index to warehouse advertisers, see pages 72-73

A
American Chain of Whses.Front Cover

B
B. & J. Trailer Co. 29
Baillargeon Exp., Ltd., J. B. 4
Parrett Company 3
Bassick Co. 64

C
Canvas Specialty Co. 66
Colson Co. 70

D
Dodge Bros.Third Cover

E
Economy Printing Service 69

F
Fruehauf Trailer Co.20-21
Fulton Bag & Cotton Mills 66

G
General Motors Truck Co.Second Cover
Gerstenslager Co. 63
Goodrich Co., B. F. 1
Gretsch & Co., Inc., Ralph..... 66

H
Highway Trailer Co. 13

I
International Carbonic 23
International Harvester Co. of Am. 27

L
Liquid Carbonic Corp. 19

M
Mack Trucks, Inc. 17

N
New Haven Quilt & Pad Co..... 67

P
Powers & Co. 68

R
Reo Motor Car Co. 25
Roloff, Inc. 63

S
Self-Lifting Piano Truck Co. 70
Sherman Hotel112
Studebaker Corp. of Amer.Back Cover

T
Turnsignal Corp. 70

W
White Tar Co. of N. J., Inc. 68